Latrobe City Council Asbestos in the Home Removal Kit
Evaluation Report 2008
Acknowledgements

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Latrobe City Council
Gippsland Asbestos Related Diseases Support Inc.
Gippsland Trades and Labour Council
Victorian Waste Management Association
WorkSafe Victoria
University of Melbourne, Evaluation Unit

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Executive Summary

The Latrobe City Council Asbestos in the Home Removal Kit Project was developed by the Latrobe interagency group as a result of concerns that more needed to be done to enable home renovations and redecorations involving asbestos materials to be carried out safely, and the difficulties of disposing of asbestos in some areas may be contributing to its unsafe handling and disposal.

The purpose of the project was to provide a kit with materials and advice for home renovators in Latrobe to enable them to safely remove, transport and dispose of small quantities of asbestos-containing materials from within and around their homes.

The Asbestos in the Home Removal Kit is the major outcome of the Project. The focus of this evaluation was predominantly the kits’ quality, adequacy and acceptability to users as well the use of protective equipment and safe work practices.

Ninety two residents who had previously purchased the kit were contacted for the evaluation. Of these, 22 had not yet used the kit, and 70 kit users agreed to participate in the evaluation. A telephone survey was administered using a semi-structured questionnaire by a Department of Human Services (DHS) officer between December 2007 and March 2008.

The evaluation found that the Latrobe City Council Asbestos in the Home Removal Kit was considered to be an extremely valuable resource by the majority of respondents. Users considered the content of the kit to be of sufficient quality and quantity to support the asbestos removal jobs for which the kit was intended using the majority of items in the kit. The majority of users were also satisfied with the quality and adequacy of the service provided with the kit as well as the cost.

The evaluation has identified some areas for improvement to the kit and the associated distribution and disposal services. Making these changes will further improve the project’s potential impact of reducing exposure to asbestos dust among home renovators.

The overall very positive responses in relation to the project and the kit strongly support replication of both the project and kit in other municipalities of Victoria and in other jurisdictions.
Background

Asbestos

Asbestos is the name given to a group of fibrous silicate minerals found both in natural sources in the environment and from the extensive industrial and commercial use of asbestos in the past. Asbestos can be found in many materials that were widely produced in Australia between the 1940’s and 1980’s (enHealth 2005, p.3, Department of Human Services 2005a, p 2). It is an attractive product for its insulation, fire resistance and strength. Many of these materials are found in the non-occupational environment such as in and around the home with the most common being asbestos-cement products commonly called ‘fibro’ and AC sheeting. Asbestos can be found in the home in areas such as corrugated asbestos roofing, insulation, lining above windows and doors, eaves and in wet areas such as the wall and ceiling lining and under floor tiles.

Figure 1: Typical Locations for Asbestos Products in Domestic Buildings (enHealth 2005, p.10)

A study of 1000 home renovators commissioned by DHS entitled ‘Are messages about reducing exposure to asbestos and lead-based products during home renovation reaching those most at risk’ (unpublished DHS 2008) found that 88 percent of respondents had renovated or redecorated their home in the last five years and that 83 percent of these people were exposed to a potential asbestos product throughout the renovation or redecoration. The study also found that ‘nearly one third of all renovators had altered or removed known asbestos containing products’ with ‘only a quarter of these respondents were aware of this fact’ (unpublished DHS 2008, p.5). This study demonstrates the significant amount of ‘do it yourself’ renovations occurring across Victoria and the potential and real exposure to asbestos products.

Asbestos and health risks

Asbestos can be hazardous if inhaled. Health effects tend to occur many years following exposure. These health effects can include asbestosis, lung cancer and mesothelioma. The majority of asbestos-related diseases are associated with regular exposure to airborne asbestos fibres, such as through occupational exposures. However, it has not been possible to establish a “safe” level of airborne asbestos, and some cases of mesothelioma are thought to attributable to single, low concentration exposures.
Generally, the presence of asbestos in home building materials does not cause a risk to health unless the material is broken, in a poor or deteriorated condition, or is disturbed in such a way that dust containing asbestos fibres is produced. With the increasing popularity of home renovations, strategies are required to ensure that the community are aware of the risks from asbestos-containing products, and are able to manage the risks to health through the use of personal protective equipment and safe working procedures.

In recognising the home renovation trend and potential health risks, the Department of Human Services undertook a proactive and preventative approach and in 2003 published the booklet Asbestos in the home Health and safety in the home (2003). For more information visit <www.health.vic.gov.au/environment/downloads/asbestos_home2003.pdf>. The booklet was distributed through local councils and via the web to provide advice to householders regarding precautions that should be taken when disturbing asbestos-containing materials in the home and details regarding the correct procedures for wrapping and the safe disposal of asbestos waste.

In Victoria, a range of legislation covers how asbestos should be safely managed to protect both occupational and community health. The nature of an asbestos-related issue determines how it is managed and which agencies become involved. It is not illegal for home owners to remove asbestos however legislation exists to assist the prevention and control of environmental health hazards, including asbestos. In 2005, the Department of Human Services published information and guidance for stakeholders on roles and responsibilities of agencies, and relevant legislation, for the management of asbestos issues. The publications were “Environmental health notes No. 1: Asbestos – Roles and responsibilities for government” (2005) and “Environmental health notes No. 2: Guidelines for local government on asbestos” (2005).

Asbestos and the Gippsland Region

The Gippsland Region, in particular the Latrobe Valley, has a long history of asbestos exposure associated with the electricity industry. It has been reported that: in 1924 when the first State Electricity Commission (SEC) power station opened, thousands of tonnes of asbestos was used for insulation with no protection for workers until the late 1970s. The study by Begg, Vos and Stone (2001, p.11) found ‘higher morbidity and mortality rates for Latrobe and Hobsons Bay are of particular interest. These results confirm the existence of asbestos-related problems in the Latrobe Valley among males. That females do not experience higher rates in this region is significant, suggesting industrial exposure as the most likely aetiology’.

With the Latrobe Valley’s history, experience and heightened awareness of asbestos exposure and related disease the community have created local support networks and strong advocacy skills to raise the awareness of all asbestos exposure risks including asbestos n and around the home.

Since 1981, in recognising the risks with asbestos, Latrobe City Council has accepted asbestos from residents of Latrobe and other municipalities at its Maryvale landfill; subject to the asbestos being securely wrapped and labelled and prior arrangements having been made with the Council. Since 2004, the Council has charged residents $20 per cubic metre to dispose of this material at the landfill.

In 2005, regional stakeholders in Gippsland established an interagency group in a collaborative effort to focus on asbestos in domestic settings in Latrobe City.

The interagency group consisted of:
- Environment Protection Authority (EPA)
- Latrobe City Council (LCC)
- Gippsland Asbestos Related Diseases Support Incorporated (GARDS)
- Gippsland Trades and Labour Council
- Department of Human Services (DHS)
- Victorian Waste Management Association (VWMA)
- WorkSafe Victoria

The group undertook a number of related projects, including the Latrobe City Council Asbestos in the Home Removal Kit Project which is the subject of this evaluation.
Asbestos in the Home Removal Kit Project

The Asbestos in the Home Removal Kit Project was developed by the Latrobe interagency group as a result of concerns that more needed to be done to enable and ensure that home renovations and redecorations involving asbestos materials are carried out safely, and the difficulties of disposing of asbestos in some areas from home renovations may be contributing to its unsafe handling and disposal.

The purpose of the project was to provide a kit with materials and advice for home renovators in Latrobe to enable them to more safely remove, transport and dispose of small quantities (1m³) of asbestos-containing materials from within and around their homes.

During 2006 and 2007, the Latrobe interagency group designed the Asbestos in the Home Removal Kit ("the kit") and the Latrobe City Council commissioned the supply of the kits from private enterprise. The cost of supplying the kit inclusive of the DVD at the time the kits were originally sourced by Latrobe City Council was $62.20 (inc GST). This cost excludes the costs of DVD production and all costs of staff time to plan and implement the project.

The project aimed to keep the cost of the kit at a minimal price to ensure affordability to all socio-economic groups within the community. The kits, together with an instruction DVD, were produced with a $10,000 non-recurrent grant from the Department of Human Services and additional resources from Latrobe City Council as well as advice from the interagency group and local private enterprise.

The kit (Diagram 1) contained:

- A copy of the DVD instruction guide (11 minutes approx.)
- A letter and "7 step" instruction sheet (Appendix 1 and 2 respectively)
- A DHG booklet Asbestos in the home
- Two breathable disposable coveralls
- Four pairs of ‘blue rhino’ disposable gloves
- Two pairs disposable overshoes
- Two vented flat fold respirators
- A one litre spray mister
- A tube of 250ml PVA glue
- Two 600 x 450mm 200um printed disposable bags
- Two 1100 x 700mm 200um printed disposable bags
- Two 5m x 3m 200um black plastic wrap
- Three asbestos warning stickers
- A roll of duct tape
- One 6m printed barrier tape
- Four wipe down rags
- One voucher for disposal at licensed transfer station/landfill.
The items of personal protective clothing (PPC) were selected because they were considered light weight and not sufficiently durable to encourage them to be kept and reused on this or other work.

The kits were made available for purchase and collection by home renovators at the Latrobe City Council offices in Morwell, at a cost equivalent to the tipping fee of $20. Whilst the kit was for small quantities of asbestos, residents were able to dispose of larger quantities of material by paying a further $20 per cubic metre.

Prior to purchasing a kit, customers attended an information session (Appendix 3) and viewed the DVD demonstrating the use of the kit at the Latrobe City Council offices in Morwell, registered their names and contact details with the Council, and gave consent to be contacted by telephone to participate in the evaluation of the kit (Appendix 4). Latrobe City Council estimates that the officer time involved in the supply of each kit, including the information session, is 75 minutes per kit. In addition officers from Latrobe City Council are involved in promotion of the kit.

In March 2007, Mr Matt Viney MLC Member for Eastern Victoria, launched the kit and its availability was publicised through articles in the local newspaper, Council’s residents’ newsletter, the Council’s customer service network, web page as well as at transfer stations. The kit was also publicised through the Gippsland Asbestos Related Support (GARDs) newsletter and website.

Between March 2007 to March 2008, 89 kits were issued to households in Latrobe City and 9 were issued to households in other municipalities in Gippsland.
Evaluation

The Asbestos in the Home Removal Kit is the major outcome of the Council’s Asbestos in the Home project. This evaluative enquiry can be classified as clarificative in nature and utilised a program logic approach drawing on an ‘if and then’ model. The evaluation of the kit focussed on the kit’s quality, adequacy and acceptability to users as well as the use of protective equipment and safe work practices. There were a number of other important activities and interconnected processes that contributed to and enabled the kit to be developed and implemented that, due to time and resource limitations, do not form part of this evaluation.

Aims

The evaluation aimed to determine:
1. Whether the behaviour or actions of the participants were in accordance with the instructions/advice provided
2. Whether the content of the kit was of sufficient quality and quantity to support the asbestos removal jobs carried out by the users
3. The quantity and type of materials in the kit which were not used
4. The perceptions of the purchasers about the quality and adequacy of the service provided with the kit, including the asbestos education session and the disposal arrangements
5. Purchasers’ views regarding the cost of the kit and their reaction to potential price increases
6. Whether the key aspects of the project implementation (in particular the asbestos education session, subsidy for kits, inclusion of disposal voucher with kit sale) can be replicated in other municipalities of Victoria and in other jurisdictions.

Negotiating and Designing the Evaluation

Initially a draft evaluation plan was designed with input from the interagency group to guide the evaluator and to ensure the evaluation kept within the agreed scope. As part of this process a schematic program logic map was developed based on an ‘if and then’ model to assist in understanding all contributing elements of the project and to assist in negotiations with the interagency group about what aspects of the project would be included in the evaluation (Appendix 5).

A program logic is simply described as a program’s theory of action (Funnell 1997, p. 5) or how a program is supposed to work. The purpose of logic models are to help map ideas and show causal relationships, identifying key project or program elements and to clearly demonstrate how these elements relate to each other, pinpoint underlying assumptions, and generally show a picture of the logical series of events from program interventions (activities and processes) to program outcomes and program impacts (Cooksy, Gill and Kelly 2001, p. 119; Millar, Simeone and Carnevale 2001, p. 74).

The program logic was presented to the interagency group on a large butchers paper. This program logic was developed based on the original project plan. A discussion was facilitated on all the activities and processes in the program logic, what project components to evaluate, the criteria to ‘judge the worth’ of what is to be evaluated, the measures used to judge the criteria, who will receive and use the evaluation information, suggested methods that could be used in the evaluation and preparing the group for negative results. The outcomes of this session were included in the final evaluation plan.

The interagency group decided not to focus on those elements of the project plan which had not been completed. Members were most interested in an evaluation which would provide information to guide improvement of the removal kit and associated communication materials; information to guide improvement to the services provided by council associated with the kit including supply arrangement, the information session and disposal arrangements; and to understand if the kit was used according to the instructions provided. The sustainability of the supplying the kit given the grant was non-recurrent and the subsidisation of the kit by Council was also of interest.
Methodology

All individuals who had purchased a kit (n=98) were approached to participate in the evaluation. An introductory letter was followed up with up to four attempts to make telephone contact with each person on different days and at different times. A semi-structured questionnaire (Appendix 6) was designed for administration via telephone and piloted with the first three participants. Some minor changes were made to the questionnaire to improve the ease of use for the interviewer, and the pilot data were included in the main analysis. Interviews were conducted by a DHS officer who had not been involved in the project design or implementation between December 2007 and March 2008. Survey responses were recorded in hard copy and then entered into a Microsoft Access database and analysed using SAS v9.1.

Of the ninety-two residents (94%) who were successfully contacted, 70 (76%) had actually used the kit and all agreed to participate with the evaluation, while 22 (24%) who had not yet used the kit were thanked for their time and were not invited to participate. One survey was not fully completed.

Data were also collected from Latrobe City Council records of asbestos disposal at the Maryvale landfill.

Results

From March 2007 to January 2008 inclusive, 105 residents disposed of wrapped and labelled asbestos at the Maryvale landfill. Of these,

- 50.5% used the previous (no kit) disposal method
- 49.5% used the kit.

The above data is important as it demonstrates the approximate reach of this intervention. That is, around one half of all people who legally disposed of asbestos at that landfill from a domestic setting had performed the removal using a kit obtained from Latrobe City. No data are available to indicate whether people who performed asbestos removal jobs without the kit took the necessary measures to protect themselves from exposure to asbestos dust. If it is assumed that people are less likely to protect themselves to the same degree without a kit, then it is desirable to take steps to try to increase the proportion of jobs carried out with the assistance of a kit.

Recommendations

1. Latrobe City Council should continue and, where possible, expand their marketing of the availability of the Asbestos in the home removal kit to residents of Latrobe City.

2. Latrobe City Council should continue to monitor the proportion of asbestos removal jobs carried out with the assistance of a kit.

People who used the kit (users)

Of the 70 people who purchased and used the kit, 63 (90%) lived in Latrobe City. Most of the Latrobe City residents lived within a radius of 16k from Morwell, including the towns of Moe and Traralgon. Morwell is the location of the Council office from which the kit was distributed (Chart 1).
The majority of purchasers became aware of the kit through an enquiry to the Latrobe City Council office or through the local print media (Chart 2).

The asbestos removal kit was mainly used by one or two people, which is consistent with the small-scale removal tasks for which the kit was intended, however 4 respondents indicated that more than two people had used the kit (Chart 3).
The survey did not seek to collect the age and gender of all people who worked on the removal job, rather only the survey respondent. The majority of respondents were male (80%) and aged between 40-69 years (64%) (Chart 4).

How the kit was used (uses)

Chart 5 shows the numbers of jobs carried out during each month of the evaluation period. The busiest period for asbestos removal was the five month period from October 2007 to February 2008, when 34 jobs were carried out. This could be associated with warmer weather and the holiday period or may reflect increasing demand for the kits over time as community awareness of the kits increased.
The areas of properties/buildings from which the asbestos-containing material was removed is shown in Chart 6. In 39% of properties, asbestos-containing sheets or other materials were removed from interior surfaces of buildings only. These included ceilings, walls and floors of lounge rooms, kitchens, bathrooms, laundries and toilets.

In 31% of properties, asbestos-containing sheets and other materials were removed from exterior surfaces only. These included roofs, eaves, external walls, fences and out-buildings, including bungalows, garages, sheds, workshops and a children’s cubby-house.

In 13% of properties, asbestos-containing sheets or other material was removed from both internal and external parts of buildings.

In 17% of properties, loose, mostly broken asbestos sheets were removed from under and behind houses, from garages and fire-damaged buildings, and from accumulations above and below the ground in paddocks and yards.
Respondents reported that the dismantling and wrapping of the asbestos took from 1 to 4 hours (53%), from 5 hours to 1 day (32%) and from 2 to 7 days (15%).

These data indicate that:
- 47% of respondents reported that the time taken to do the job exceeded 4 hours, suggesting that nearly half of the users carried out removal tasks that were either larger in size, or took longer in time to perform, than those for which the kit was intended and
- in at least 15% of the cases the work was undertaken over multiple sessions (where one session could be considered to be four hours).

This information is important as the kit was intended and designed for small asbestos removal jobs with the kit only containing sufficient personal protective equipment for two people for one session of work, or one person for two sessions of work. It is possible that some kit users either re-used personal protective equipment, or compromised the integrity of their protection by partially removing their PPE for breaks.

It is therefore recommended that a mix of strategies are implemented to further emphasise that the kit is only designed for small jobs (ie. 1m$^2$) completed by two people in one session or work, or one person for two sessions of work), to better assess the job size and duration to determine the appropriateness of the kit and the need for additional materials, and also make available additional ‘booster’ kits containing sets of the personal protective equipment required for additional sessions of work.

**Recommendations**

3. That a more rigorous approach to assessing the size and nature of the job be implemented, including the development of a ‘decision tree’ style job assessment tool. This job assessment tool could be designed for self assessment.

4. That a ‘booster kit’ be made available for sale by Latrobe City Council which contains personal protective equipment for an additional session of work.

5. That specific written advice be developed about removal and disposal of personal protective equipment at the conclusion of each session of work, and what actions are necessary when ‘breaking a session’ of work. This should be included in appropriate communication materials and the information session.
Fifteen respondents (21%) reported that they had wrapped the asbestos, but had not disposed of the asbestos at the landfill at the time of the interview. Respondents were only asked for the month in which they performed the removal job, so it is not possible to determine with accuracy the amount of time that asbestos had been at the property after it had been wrapped. Four of these respondents (27%) had more than 3 months elapse since they had performed the job to the time of interview. This delay in disposal for a small number of respondents may indicate some difficulty with transport or access to disposal facilities for some kit users.

In order to try to minimise the time between the removal job being performed and the disposal of the asbestos, it is recommended that the Latrobe City Council implement a tracking system which ‘flags’ cases where the kit has not been taken to the disposal facility. These cases should be contacted and assisted with the disposal by negotiating a mutually convenient time for the disposal facility to receive the asbestos. This tracking system can also identify those kits that are not being used.

**Recommendation**

6. That Latrobe City Council implements a tracking system to identify delays with disposal, and facilitate more timely disposal where possible, and to identify those who purchased a kit but no longer intend on performing the removal job.

**Whether the behaviours or actions of the participants were in accordance with the instructions/advice provided.**

In this section compliance with recommended safe practice and the disposal of the material is presented. The written instructions/advice provided with the kit were the Council’s “7 step” instruction sheet, as shown in Appendix 2, and the DHS booklet *Asbestos in the home* (DHS, 2003).

Recommended safe practices included those items are listed from A to H in Table 1.

Relevant survey responses included:
- the items detailed in Table 1 and
- use of the respirators, disposable coveralls, disposable gloves, black plastic wrap, disposable overshoes, large and small disposable bags, spray mister and PVA glue, all of which are detailed in Chart 17 and for which the data indicated high to very high levels of use and, therefore, safe practice.

**Table 1: Whether respondents complied with recommended safe practice**

<table>
<thead>
<tr>
<th>Item</th>
<th>n =</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Cut &amp; use drop sheet</td>
<td>70</td>
<td>60.0%</td>
</tr>
<tr>
<td>B. Read DHS booklet <em>Asbestos in the home</em></td>
<td>70</td>
<td>70.0%</td>
</tr>
<tr>
<td>C. Advise neighbours to close windows and doors prior to job</td>
<td>70</td>
<td>58.8%</td>
</tr>
<tr>
<td>D. Close nearby windows, doors &amp; air vents when working outdoors</td>
<td>40</td>
<td>82.8%</td>
</tr>
<tr>
<td>E. Isolate work area when working indoors</td>
<td>37</td>
<td>92.9%</td>
</tr>
<tr>
<td>F. Ask people to leave the area before carrying out the job</td>
<td>70</td>
<td>97.1%</td>
</tr>
<tr>
<td>G. Spray &amp; wipe down all surfaces to pick up dust &amp; debris</td>
<td>70</td>
<td>84.3%</td>
</tr>
<tr>
<td>H. Wash hands and shower and wash hair after handling asbestos</td>
<td>70</td>
<td>92.9%</td>
</tr>
</tbody>
</table>

In calculating compliance, responses that indicated that the practice was not applicable to the job they were performing were excluded.
Although the survey did not seek respondents’ reasons for believing the guidance was not applicable, the following reasons were voluntarily provided:

- in regard to items C, E and F, respondents advised that neighbours, family and/or friends were away at the time or were not nearby, or that the location of the job was remote, for example, surrounded by vacant land
- in regard to item D, respondents advised that the location of the job was remote from dwellings, was within a contained area, for example a shed, or the job was very small or consisted only of the removal of loose or previously broken sheets.

Although the level of compliance for item B was 70% (reading the DHS booklet Asbestos in the home), this may be indicative that watching the DVD met the information needs of kit users and they felt that they did not need to read the Asbestos in the home booklet. It may also indicate that the DVD is the preferred method of adult learning. The less than 100% compliance may also emphasise the need for the council to highlight the publication, or to include current DHS advice in the Council’s written instructions.

The low responses for items A (cut and use a drop sheet) and C (advise neighbours to close windows and doors before commencing the work) emphasise the need to highlight these issues in the Council’s instructions and information session.

**Disposal of protective materials**

Disposal of the material includes the disposal of protective materials such as coveralls and respirators and the disposal of asbestos-containing material and used kit items.

The protective materials indicator items surveyed were the disposal of used coveralls and used respirators.

**Table 2: Method of disposal of coveralls and respirators**

<table>
<thead>
<tr>
<th>Item</th>
<th>n=</th>
<th>Placed in asbestos removal bag</th>
<th>Threw out later</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used coveralls</td>
<td>68</td>
<td>67 (98.6%)</td>
<td>1 (1.4%)</td>
</tr>
<tr>
<td>Used respirators</td>
<td>69</td>
<td>69 (100%)</td>
<td>0</td>
</tr>
</tbody>
</table>

Very high levels of respondents reported disposing of these items in accordance with Council instructions. The survey did not ascertain whether these items were disposed of at the end of the work session or at the end of the entire job. See recommendation 5.

**Disposal of asbestos material**

The majority of respondents (70%) used the Maryvale Landfill to dispose of the asbestos material (Chart 7). Other respondents who disposed of asbestos material used either used another approved landfill in a neighbouring municipality or a licensed asbestos removalist. There were 22% of respondents who still had asbestos material on site at the time of the interview. Reasons included restrictive disposal timelines and transport issues.

As a result of early feedback from the evaluation, the Council has introduced more flexible disposal booking arrangements to assist residents who are unable to attend the landfill at the designated time, and a tracking system to enable follow up with the purchaser when a kit has not been used for disposal at the landfill within a period of 6 months.
Whether the content of the kit was of sufficient quality and quantity to support the asbestos removal jobs carried out by the users

This section presents results related to:

- the quantity and adequacy of the materials provided
- the quality of the materials provided
- the comfort and fit of the materials
- the effectiveness and usefulness of the materials
- additional comments of respondents.

The quantity and adequacy of the materials provided

- Table 3 shows the numbers of items used by the respondents and, shaded blue, the usage provided for in the kit. Eighteen respondents (26%) reported using additional respirators, 9 respondents (13%) reported using additional pairs of overshoes and 5 respondents (7%) reported using additional pairs of coveralls to those provided in the kit. This is an indicator that users of the kit performed removal jobs that are larger than were intended for the kit, or performing the jobs over multiple sessions of work. It also indicates that some respondents have independently sourced additional personal protective equipment to supplement the materials provided in the kit. See recommendations 4.

Table 3: Items used and usage provided for in the kit

<table>
<thead>
<tr>
<th>Item</th>
<th>Number of items used</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Coveralls</td>
<td>2</td>
</tr>
<tr>
<td>Pairs of gloves</td>
<td>3</td>
</tr>
<tr>
<td>Pairs of overshoes</td>
<td>6</td>
</tr>
<tr>
<td>Respirators</td>
<td>1</td>
</tr>
<tr>
<td>Small bags</td>
<td>7</td>
</tr>
<tr>
<td>Large bags</td>
<td>5</td>
</tr>
<tr>
<td>Black plastic</td>
<td>3</td>
</tr>
</tbody>
</table>
Chart 8 shows high levels of satisfaction regarding the quantity of materials provided to do the job, these included overshoes, gloves, black plastic, small bags, large bags and coveralls. The exception was the number the respirators, which were considered sufficient by 73.9% of respondents. This is another indicator that people performed the removal task over multiple sessions of work, and possibly needed more personal protective equipment than was supplied with the kit.

The black plastic sheets supplied in the kit were 5mx3m in size. This size was chosen as it is big enough to wrap a full sized sheet of ‘AC Sheeting’ if removed in one piece. When asked whether this was a sufficient size, most respondents (72%) indicated it was just right. The sheets were too large for 11% of respondents, and too small for 15% of respondents (Chart 9).
Quality of the materials in the kit

In response to questions relating to the quality of the gloves provided in the kit,
- 62.9% of respondents advised that the gloves had broken or torn
- 55.7% advised that they used gloves other than those provided with the kit.

In response to a question regarding the use of other gloves,
- 48.6% advised that other gloves were used because the gloves in the kit broke or tore
- 14.3% advised that more durable gloves were used for safety reasons.

Most respondents (67.1%) reported that items in the kit had broken or torn. Of the individual kit items which broke or tore, gloves were reported most frequently, followed by overshoes (Chart 10).

![Chart 10: Percentage of respondents who advised that an item in the kit broke or tore](chart)

The challenge faced by the designers of the kit is to provide protective materials that provide the necessary protection at a reasonable cost, while not providing a product that users will be unwilling to throw away at the end of the work session.

The high proportion of respondents indicating that gloves tore, or that used other gloves than those supplied in the kit, indicates that more durable gloves are required to do the types of asbestos removal tasks being performed.

Following early feedback about the evaluation results, Latrobe City Council has replaced the gloves with a more durable product.

Recommendation

7. Latrobe City Council continue to supply more durable gloves in the kit.
The comfort and fit of the materials provided

Chart 11 shows the responses to a question enquiring which items in the kit did not fit properly. Whilst overshoes were the most commonly reported ill-fitting item, less than 15% of respondents identified the fit of an item to be an issue.

The majority of respondents (80%) advised that the coveralls in the kit were comfortable, however approximately one quarter of respondents went on to advise that the coveralls worn either became too hot when used, or were tight and restricted movement.

The effectiveness and usefulness of the materials

Spray mister

Specific data was sought regarding the effectiveness and usefulness respectively of the spray mister and smaller plastic bags in the kit. Most respondents (68.6%) advised that the spray mister was effective in wetting down the area worked on. Of the respondents who carried out interior jobs only (n=28), 92.9% advised that the spray mister was effective, whilst of those who carried out exterior jobs only (n=33), only 45.5% advised that the spray mister was effective (Chart 12). Given the low utilisation of the spray mister for external jobs, it is recommended that information on alternative methods for wetting down larger areas in outdoor jobs be provided.

During the evaluation process advice was received from the Manager Hazard Management Division, WorkSafe Victoria regarding disposable PPC not being reused and, before its removal, the need for PPC to be lightly sprayed with water to limit the potential for inhalation of airborne dust during removal.

Recommendation 5 supports the communication of this advice, and if adopted these strategies may increase the use of the spray mister for the purpose of lightly wetting PPC prior to removal for all jobs, both internal and external.
Recommendations

8. Information on the best method to wet down outdoor jobs to be provided in Council information.

Smaller plastic bags

Most respondents (84.3%) advised that the smaller plastic bags were useful.
Overall kit use

Chart 13 shows respondents’ advice regarding the overall usefulness of the items in the kit. The data indicates that 76% of the respondents considered the items very useful or useful, whilst 17% considered that some items were less useful.

![Chart 13: Responses to overall usefulness of items in the kit]

Of the items reported as less useful, gloves were the most commonly cited, due to durability issues. Other issues identified included the nozzle of the mister spray clogging, overshoes being too slippery, too small or too easy to break, the lack of alternative sizes for the coveralls, duplication of information in DVD and written material, and the desire to have higher quality P2 respirators. (Chart 14).

![Chart 14: Items that respondents reported were less useful]
Additional comments of respondents

Respondents were also given the opportunity to provide additional comments regarding the quality and quantity of items in the kit (Appendix B). Some of the positive qualitative comments were:

'The kit was terrific. We were very pleased with it',
'I would like to congratulate the Council on this initiative. If it saves one life, it was well worth the effort',
'I am glad the kit was available. It teaches people about the proper disposal of a dangerous product',
'A brilliant idea...The spray bottle should be standard equipment for electricians and in the electrical industry',
'A perfect idea. A great thing that the Council has done. The more people that use this kit the better',
'A great initiative. It helps people cope with the asbestos issue' and
'The kit made removal possible. It should stay available. It gives people the incentive and ability to do the right thing'.

Respondents suggestions for improvement included:

'It was a great initiative. It would be handy if additional material was available though, for example, plastic',
'Insufficient gloves. The rest was good',
'The kit was pretty much aimed at indoor jobs. Not much information was provided for outdoor jobs',
'Our only recommendation is that more sturdy, durable gloves be provided with the kit' and
'The size and strength of the packaging was not sufficient. It needs to be as robust as the material it is used for'. 
The quantity and type of materials in the kit which were not used

This section considered results related to:
- the use of protective items
- the relationship of items not used and the quality/suitability of those items

The use of protective materials

Protective materials had a very high rate of usage, particularly the personal protective equipment (PPE) of respirators, coveralls and gloves (Chart 15). The spray mister and PVA glue were used by 80% of respondents.

![Chart 15: Percentage of respondents who used & did not use kit items](image)

The relationship of items not used and the quality and suitability of those items

Chart 16 shows the percentage of respondents who advised that one or more kit items were not used, and those who stated quality or suitability was the reason that the item was not used.

The most commonly reported items that were not used were the spray mister and PVA glue (20%), small disposable bags (10%), overshoes (8.6%) and large bags (7.1%).

The reasons relating to quality and suitability for not using items in the kit were:
- Required a larger spray device for their job (4.3%),
- Preferred to use better quality padded safety gloves (2.9%),
- Reported that the overshoes either tore or were slippery (2.9%).
Respondents reported that they used all of the black plastic (81.4%), respirators (71.4%), small bags (70%), large bags and pairs of overshoes (67.1%), and coveralls (64.3%) (Chart 17). The chart also shows that 58.6% of respondents used less than all of the 4 pairs of gloves provided in the kit.

This demonstrates that there is a small amount of 'waste' associated with the kit, with some instances where materials are supplied and not used. For all items, except gloves, in the majority of cases where multiple units of the item (i.e. two pairs of coveralls) were supplied, they were both used.
The perceptions of the purchasers about the quality and adequacy of the service provided with the kit, including the asbestos education session and the disposal arrangements

This section considered results related to:
- access to the kit
- the asbestos education session and DVD
- asbestos disposal arrangements.

**Access to the kit**

As indicated previously in Chart 2, 32.9% of respondents advised that they learned that the kit was available from the Council through an enquiry to the Council office, 25.7% advised that they learned from the print media, and 15.7% from a colleague, family member or friend.

In response to a question seeking advice about what difficulty, if any, respondents had had obtaining a kit, 88.6% advised that they had had no problem with accessing the kit, however 11.4% did indicate they had some difficulty and provided the following comments:

- 'Restricted council hours',
- 'Difficult to make appointment',
- 'Council did not return call',
- 'Staff on holidays, had to come back',
- 'Knowing where to track a kit down',
- 'Council slow in getting back',
- 'Called several times with no response' and
- 'Had to wait 45 minutes to watch DVD'.

**The asbestos education session and DVD**

In response to questions regarding the asbestos education session and DVD, 92.9% of respondents advised that they thought it was useful to view the DVD and to speak to Council staff when collecting the kit, 82% of respondents described the level of information provided through the DVD as just right, whilst 15% described the information as too little and 72.9% of respondents advised that they watched the DVD again after collecting the kit.

![Chart 18: Respondents' advice regarding the level of information provided through the DVD](image-url)
Recommendation

9. The DVD remains an integral component to the contents of the kit.

The respondents described the change in their knowledge of asbestos handling as a result of using the kit as improved a lot (45%), improved a bit (34%) and knowledge stayed the same (20%) (Chart 19).

Asbestos disposal arrangements

The majority of respondents disposed of their removed asbestos and other waste material according to the advice and facilities provided for the purpose, i.e. 70% used the Maryvale landfill and 7% either used another authorised landfill or a licensed asbestos removal contractor (Chart 7). Whilst 22% of respondents advised that they intended to dispose of the materials in accordance with the instructions, they still had all or some of the items on site at the end of the evaluation period and 15% advised that they had experienced problems associated with the disposal of the material.

Reasons cited for the non-disposal of the material included restrictive scheduling of disposal times and transport problems.

Recommendations

10. Council continue to provide a local facility that can accept domestic asbestos waste.

11. Council consider additional flexible arrangements for disposal with people who are experiencing difficulty and develop a policy to address situations where asbestos remains on the domestic site following removal.
Additional comments of respondents.

In response to a question inviting additional comment regarding the kit and the study, (Attachment 6), respondents provided the following advice regarding quality and adequacy of the service provided with the kit:

Positive:
‘We were happy about the service and the kit. They were excellent’,
‘I was very impressed with the kit and how it was marketed’,
‘I was overjoyed about how well it went. It enabled us to get rid of all of our asbestos in 2 weeks’,
‘The initiative was well devised and thought through. The more people that use this kit the better’,

‘I think it was a very comprehensive DVD and kit’ and
‘We were very impressed that the Council was providing this service’.

Suggestions for improvement –
‘It needs to be easier to dispose of material’,
‘The advertising was not too good. A lot of people haven’t heard about the kit and the low cost of doing the job yourself’,
‘No signage at Maryvale. The disposal site was not indicated very well’,
‘If more people knew about the service, more people would use it’,
‘There should be more awareness of the kit’
‘The DVD focussed on bathroom renovation, and did not cater for external work’, and
‘Additional advice should be included in the DVD or instruction sheet, for example, about washing and showering’.

Purchasers’ views regarding the cost of the kit and their reaction to potential price increases

This section considered response in relation to satisfaction and kit pricing.

Satisfaction of respondents

Respondents reported a very high level of satisfaction with the kit (Chart 20). Ninety seven percent reported that they were either very satisfied (75%) or satisfied (22%). One respondent reported being very dissatisfied with the kit because the size and strength of the plastic was not sufficient for their job.
A very high level of respondents (97%) reported that they would or had already recommended the kit to others.

**Cost**

During the interview, respondents were reminded that the price of $20 that they had paid for the kit covered the disposal fee, and that the kit was provided free of charge as part of a trial project.

During the survey, respondents were not asked for their reaction to potential price increases. However, participants were asked what they thought the estimate cost of the kit would be if they had to purchase the equivalent materials from a local hardware or safety shop (Chart 21). 67% thought the kit would cost between $50 and $100.
These results indicate that there is scope for the purchase price of the kit to rise without affecting the view of users that the kit was good value for money. Any price rise however may affect people’s ability to pay, and could reduce access to the kit, especially for people on low incomes. Should it become necessary to change the price of the kit, consideration should be given to maintaining the lowest price possible for pensioners and health care card holders.

**Additional comments of respondents**

In response to a question inviting additional comment regarding the kit and the study (attachment 6), respondents provided the following advice regarding cost:

‘Good idea, and a reasonable price’,
'The kit offers an opportunity for people in the lower income groups to get rid of their asbestos',
'A lot of people haven't heard about the kit and the low cost of doing the job yourself',
'I would have paid $50 for a better kit. The kit saved me $1900 over the quote I received',
'It was good to have it. It saved us a lot of money' and
'I would like to thank the Council. The kit enables people on lower income to dispose of their asbestos'.

**Whether the key aspects of the project implementation can be replicated in other municipalities of Victoria and in other jurisdictions**

This aim relates to the projects transferability to other Councils across Victoria and other jurisdictions. Many Council’s have similar structures established to be in a position to offer an asbestos in the home removal kit (such as a waste disposal facility, professional expertise within Council etc) however many may not have the funds available to subsidise the kit at $20. Whether the kit is transferable will depend on resources available.

Comments in relation to this by respondents included

‘The kit was extremely worthwhile. More councils should have it’,
‘Wished more councils did this’, and
‘The kit made removal possible. It should stay available. It gives people the incentive and ability to do the right thing’.

**Additional information**

A relatively large number of the kits issued by Latrobe City Council had not been used at the time of interview. Some of these kits were distributed over 6 months prior to the time at which contact was made for the evaluation. While not specifically asked as it was not part of the interview schedule, some respondents advised that they no longer intended on using the kit. Kits that remain un-used are a wasted resource that could be provided to another resident. Recommendation 6 relates to implementation of a tracking system to follow-up on kits that have been sold, but the asbestos has not been delivered to the disposal facility. Such a tracking system will also identify those kits which are no longer intended for use. Council will need to assess the cost of recovering the kits against the level of the subsidy in determining their approach to this issue.

---

**Recommendation**

12. Latrobe City Council develop a policy outlining their approach to recovering kits that have been sold that are no longer intended for use.
There was some evidence of inconsistency in written instructions and guidance in publications provided to the kit user. Drop sheets were only recommended in the Council’s 7 step information sheet, whilst advising neighbours to close window, close nearby windows, doors and vents, isolating work areas when indoors and asking people to leave the area were only mentioned in the DHS booklet *Asbestos in the home*. Spraying and wiping down all surfaces to pick up dust and debris and washing hands, showering and hair washing after handling asbestos were mentioned in both the Council’s information sheet and the DHS booklet.

Recommendation

13. Council’s 7 step process include key messages from the DHS booklet *Asbestos in the home*.

Limitations

The evaluation is not a comparative study and does not provide any data about the steps that people who did not purchase the kit took to protect themselves from asbestos dust during an asbestos removal job.

The evaluation was limited to those people that purchased and subsequently used the kit to perform an asbestos removal job before the time of the evaluation. No data were collected about the reasons some kit purchasers had not used the kit at the time of the evaluation.

The requirements to deliver a similar intervention in another municipality are well described as a result of this evaluation, but specific assessment of their readiness to implement a similar program has not been assessed.
Conclusion

The evaluation of the Latrobe City Council Asbestos in the Home Removal Kit has demonstrated this to be a valued and successful project, with high levels of acceptance and appreciation expressed by the majority of people who have used the kit.

The key findings of this evaluation were that the majority of users considered the content of the kit to be of sufficient quality and quantity to support the asbestos removal jobs for which the kit was intended and, in fact, used the majority of items in the kit. The majority of users were also satisfied with the quality and adequacy of the service provided with the kit, including the asbestos education session and the disposal arrangements and were in favour of the price paid and the subsidy arrangement for the kit.

Although the survey did not enquire whether residents reused PFC, particularly on larger jobs or work extending over multiple sessions, it is possible that some users did so. It is important that, in the future, the following points be emphasised that the kit is designed for small jobs, that the work should be planned so that the job can be completed in one session and after use, PPC must be disposed of with the asbestos waste and not reused.

Areas where the project could be improved include tools to assist the assessment of the size and duration of the job, the provision of a ‘booster kit’ to provide additional PPC where required; provision of more robust gloves; and more flexible disposal arrangements.

The overall very positive responses in relation to the project and the kit strongly support replication of both the project and kit in other municipalities and jurisdictions.
Recommendations

The following are a summary of the recommendations outlined throughout the evaluation report:

1. Latrobe City Council should continue and, where possible, expand their marketing of the availability of the Asbestos in the home removal kit to residents of Latrobe City.

2. Latrobe City Council should continue to monitor the proportion of asbestos removal jobs carried out with the assistance of a kit.

3. That a more rigorous approach to assessing the size and nature of the job be implemented, including the development of a ‘decision tree’ style job assessment tool. This job assessment tool could be designed for self assessment.

4. That a ‘booster kit’ be made available for sale by Latrobe City Council which contains personal protective equipment for an additional session of work.

5. That specific written advice be developed about removal and disposal of personal protective equipment at the conclusion of each session of work, and what actions are necessary when ‘breaking a session’ of work. This should be included in appropriate communication materials and the information session.

6. That Latrobe City Council implements a tracking system to identify delays with disposal, and facilitate more timely disposal where possible, and to identify those who purchased a kit but no longer intend on performing the removal job.

7. Latrobe City Council continue to supply more durable gloves in the kit.

8. Information on the best method to wet down outdoor jobs to be provided in Council information.

9. The DVD remains an integral component to the contents of the kit.

10. Council continue to provide a local facility that can accept domestic asbestos waste.

11. Council consider additional flexible arrangements for disposal with people who are experiencing difficulty and develop a policy to address situations where asbestos remains on the domestic site following removal.

12. Latrobe City Council develop a policy outlining their approach to recovering kits that have been sold that are no longer intended for use.

13. Council’s 7 step process include key messages from the DHS booklet Asbestos in the home.
References


5. Department of Human Services 2005a, 'Environmental health notes No. 1. Asbestos – Roles and responsibilities for government';

6. Department of Human Services 2005b, 'Environmental health notes No. 2. Guidelines for local government on asbestos'.

7. Department of Human Services June 2008, 'Are messages about reducing exposure to asbestos and lead-based products during home renovation reaching those most at risk'. (unpublished)


Appendices

Appendix 1. Latrobe Council letter to participating residents

Dear Resident

ASBESTOS IN THE HOME REMOVAL KIT

The ‘Asbestos in the home Removal Kit’ has been developed for Latrobe City residents to more safely carry out a small asbestos removal project in and around the home.

It is the first community resource of its kind in Australia, and we believe, one of the most comprehensive responses to asbestos removal in the domestic environment ever developed in the world.

The kit provides the necessary equipment and instructions to minimise the risks of handling asbestos material during the removal, packaging, transport and disposal by the householder.

For larger tasks, we strongly recommend you seek the assistance of a professional asbestos removalist. Suitable contractors can be found in the local Yellow Pages.

Because Latrobe City takes the health of its residents very seriously, we have built in formal educational and evaluation components to the program. You will have now viewed the instructional DVD and successfully answered a few simple questions to show that you too are serious about protecting your health and the health of those around you.

Please take the time to view the DVD again at least once at home before you commence the removal of the asbestos material and be sure to follow the process carefully. You will find a handy summary of the main points in the DVD, along with the ‘Asbestos in the home’ brochure with the DVD. This summary sheet can be referred to while you are carrying out the asbestos removal task.

Baw Baw Shire Council has agreed to accept asbestos from Latrobe City residents at their Trafalgar Landfill from Friday 29 February until the completion of the new Latrobe City landfill at Loy Yang. Please refer to the attached Map. The material must be wrapped and labelled as detailed in the DVD, and the parcels must be manageable by two people.

The City is able to accept asbestos between 11.00am and 11.30noon on Saturdays only. Bookings must be made by the preceding Thursday to the Landfill Team Leader on 0427 057 122.

Latrobe City has approved a special charge scheme of $20 to encourage the responsible disposal of asbestos material from the household. This includes the kit and DVD and the disposal of up to one cubic metre of asbestos. This is payable when collecting the kit. If you wish to dispose of a greater amount, this will incur a further payment of $20 per cubic metre. Payment can be made at the landfill facility by cheque or the City can send an account to you (a drivers licence will be required to verify name and address). There are to be no cash payments at this site.

Each kit is registered, and we ask that the kit be utilised within three (3) months of being issued. Please note that the six digit number on your kit will be required when the material and kit components are disposed of at the landfill.

We would also like your assistance in an evaluation of the kit to be conducted by Latrobe City Council and the Department of Human Services. To give permission for a staff member of Latrobe City or the Department of Human Services to contact you following disposal of the material, please sign the form attached and leave at reception.

Thank you for your interest in the safe and responsible removal and disposal of asbestos in our community.
Please remember to seek the advice of a professional if you are unclear about any of the work you are considering undertaking.

Yours sincerely,

MATTHEW PEAKE
Manager – Waste Services

Enc

Collect 'Asbestos in the home Removal Kit' from Latrobe City Morwell office

Commence task within 3 months. If not please return complete kit for full refund

Review DVD. Check kit to make sure it contains all items listed on box label

Undertake asbestos removal, referring to 7 step summary sheet

Make sure wrapped asbestos bundles are able to be lifted by two (2) people

Make booking for disposal at landfill with the Landfill Team Leader Ph. 0427 057 122 on the Thursday (or before) preceding the Saturday appointment. Please call above number or 1300 367 700 for any cancellations

Transport material to the Baw Baw Shire landfill Rd, Giles Rd Trafalgar (see map) on Saturdays 11.00am -11.30noon (Any material over 1 cubic metre will incur an additional charge)

Resident may be phoned following disposal at landfill for kit evaluation purposes.
Appendix 2. Latrobe Council "7 step" instruction sheet

Asbestos in the home Removal Kit

Follow these 7 steps to safely remove asbestos from your home.

1. Prepare the area
   - Make sure power is turned off
   - Clear any unwanted objects
   - Unscrew all fittings
   - Cover drain holes
   - Cut drop sheet
   - Put up barrier tape
   - Fill spray bottle with 1:10 PVA and water and shake

2. Suit up correctly
   - Overshoes on first
   - Coveralls next: starting at bottom and working up
   - Fit respirator. Not too loose or too tight. Push at bridge of nose to shape to face.
   - Hood goes over mask- not mask over hood
   - Put on gloves
   - Seal room with tape

3. Use lots of spray
   - Lay out ground sheet and double layered black wrap nearby
   - Spray whole area down with PVA solution to help prevent dust becoming airborne
   - Spray all sheets as they are removed
   - (See also step 6)
4. Remove sheets with care
   - Gently sheets off carefully with pinch bar, avoiding as much breakage as possible
   - Do not use power tools
   - Remove nails and place in small plastic bag

5. Wipe down thoroughly
   - Spray and wipe all surfaces to pick up dust or debris
   - Wipe whole work area thoroughly, using rags provided
   - Place soiled rags in small asbestos disposal bag
   - Pick up drop sheet and place carefully in bag
   - Wipe down any tools used in job and place rag in

6. Completely seal plastic sheet
   - Place filled bags in pile on black plastic wrap
   - Place all asbestos sheets, wood, screws, nails and plastic bags on black plastic wrap
   - Fold ends in and tape ends together so they are sealed.
   - Spray throughout room and into air with remaining PVA solution

7. Remove suit with care
   - Start at the top. Remove hood first. Peel suit down, turning it inside out.
   - Take off boots with suit.
   - Place suit in remaining plastic bag
   - Take gloves off, turning inside out. Place in bag.
   - Remove respirator last. Place in bag.
   - Goose neck bag and place on pile.
   - Wash hands. Have a shower and wash hair
Appendix 3. Latrobe Council ‘Asbestos in the Home Removal Kit’ Education Session

The ‘Asbestos in the Home Removal Kit’ Education session takes 20 min to 30 min. Sessions are usually done on a one to one basis, but occasionally I am able to organise small groups of up to four.

The session involves the following steps:

1. Meet at reception and go into a pre-booked room with DVD player/screen.
2. While DVD is loading, I ask resident what type of removal task - they have to determine the scale and nature of the job.
3. For example, a person who is removing an old ‘heat bank’ unit would be advised that they should not attempt to remove the asbestos by dismantling it, and that the entire unit should be wrapped up and disposed of at the licensed landfill. At this stage I also make sure that the asbestos material in question is NOT the friable type, which would need to handled by professionals only. I also explain briefly how Council became involved in the project, and the work of GARDS and other partners.
4. I explain to the resident that I am going to leave them with the DVD - that I will return in 10 minutes - and that I will be asking them a few questions to see if they have understood the information on the DVD.
5. On my return with the kit, I ask them if they have any questions. I go through each component on the label of the box, explaining that it contains everything they need to remove up to around 1 cubic metre of material, and suggest that if they have more than this then they may need to buy more of the builders - strength black plastic from a hardware shop etc.
6. I refer them to the DHS brochure in the DVD pack, which I take it out and have a look through it if time permits. I explain that all the advice in the DVD is consistent with advice they will find in the DHS booklet, and that it has also been approved by WorkSafe experts.
7. I then take them through the ‘7 Step Summary Sheet’, pointing out that this is also in the kit, and is designed for them to take into the work area for easy reference. I ask them what they understand is involved at each step. Most residents recall about 80 % of the detail, and I then ask them further questions to fill in any gaps in their knowledge.
8. I then take them through each step on the flow chart printed on page two of the letter accompanying the kit, emphasising things such as the material needing to be placed in bundles light enough for two people to lift, who to phone to make a booking for disposal at the landfill etc. Since late Feb, I have been careful to explain that the disposal point is at Baw Baw Shire landfill in Trafalgar.
9. After filling out their name and address, the first 100 recipients were invited to participate in the DHS evaluation, and were told that if they were, they would receive a phone call from a DHS officer and asked questions about how they found the kit, its components, and if there were any problems in using it!
10. They are then taken to reception, where they pay the $20 for the kit, and were reminded that they need to take this receipt to the landfill on the day.

End of session

Peter Collins
Waste Education Officer
Latrobe City Council
Appendix 4. Evaluation permission form

‘Asbestos in the home Removal Kit’ Evaluation
Permission to contact resident for evaluation purposes only

I understand I may be contacted in .................................................. by an officer of Latrobe City Council or the Department of Human Services following disposal of the asbestos material at landfill for the purposes of evaluation of the ‘Asbestos in the home Removal Kit’.

I understand this information will remain confidential and will not be passed on to any third party.

Name ..............................................................................................................

Address ...........................................................................................................

......................................................................................................................... Postcode ....................

Phone .......................... Mobile .................................................................

Email ................................................................................................................

Kit registration number □ □ □

Signature .............................

(Please tick) OFFICE USE ONLY

☐ Receipt issued for disposal at landfill for the sum of $20 (CL. R417124911522)

☐ Receipt number / date stamp

☐ Please photocopy this page to go to PC

GL51285726
ACTIVITIES/PROCESSES

**Infrastructure**
- Provide equipment
- Asbestos bags
- Overalls
- Respirator
- Reshoes
- Mask tape
- Mask plastic
- Labelling
- Kers
- Re-paid fee for disposal
- ID and info

**Proper waste disposal (transfer station)** - is this fictional to the project

**Development and implementation of standard local...**

**Education and Training**
- EHO training in asbestos risks
- Hardware store staff induction/training sessions on asbestos handling and management

**Community**
- Workshops at Bunning's - 'come-n-try'. Asbestos ID, handling and disposal
- Update Latrobe Council website info on asbestos ID, handling and disposal
- Update the 'resident handbook'
- Kits registered and distributed to persons registering for planning applications, through customer service and transfer stations.
- Information session at Council office to those who receive a kit when kit is distributed

**Wider Publicity/Promotion**
- Media (publicising)
- Launch of the program
- Promotion in the Asbestos News
- Collex - Asbestos disposal in the A-Z Guide to Waste
- Collex - 'no asbestos' stickers on every domestic wheelie bin in Latrobe
THEN

DISTAL OUTCOMES

Minimise asbestos contamination in the home environment. (reduced dust, furnishings and air contamination)

Reduced contamination of transport and disposal routes.

Minimise asbestos exposure to home renovators, residents, pets and wider community.

Minimise exposure of employees at waste disposal facilities (transfer stations) to asbestos

Reduction in mortality and morbidity associated with asbestos in the community, and among those involved in the removal and storage of asbestos waste.
Appendix 6. Questionnaire

Evaluation of Latrobe City asbestos removal kit
2008 TELEPHONE QUESTIONNAIRE OF HOME RENOVATORS WHO USED THE KIT

Interview No: _______ Interview date and time: ____________________________
Interviewer: Ray Goudey

Kit No: _______ Town: ____________________________ Date purchased: __________

IMPORTANT: UNLESS STATED OTHERWISE, DO NOT READ SUGGESTED RESPONSES. CIRCLE SUGGESTED RESPONSES GIVEN BY RESIDENT.

Initial telephone contact:

"Hello, My name is Ray Goudey, and I am with the Department of Human Services. I am ringing on behalf of Latrobe City Council to seek your household’s involvement in the evaluation of the council's asbestos removal kit, which you purchased in (READ MONTH AND YEAR AS ABOVE)."

A 1. May I speak to the person who used the asbestos removal kit at your house?
   1. Yes
   2. No
   3. Don’t know  Q1
   4. Refused  Q1

B 1. When would be a convenient time for me to speak to the user please?
   1. Response [SPECIFY DATE AND TIME]

2. Don’t know
3. Refused

(If necessary:) “Thank you. I’ll be back in touch at [SPECIFY DATE AND TIME]."

Conversan with user of kit:

"Hello, My name is Ray Goudey, and I am with the Department of Human Services. I am conducting a survey on behalf of Latrobe City Council to help evaluate the council’s asbestos removal kit you purchased in (READ MONTH AND YEAR AS ABOVE).

We are seeking feedback from residents regarding their experience so we can advise the council as to whether improvements are required to the kit or to the council's service.

Before we begin, you need to know that the survey will take approximately 15 minutes. Any information you give will be completely confidential and your answers will not be able to be identified.

Some of the questions in this survey are about personal information and actions. You do not have to answer any question if you do not feel comfortable about doing so.”

1. Are you the person who used the asbestos removal kit at your household?
   1. Yes
   2. No

2. Are you over the age of 16 years?
   1. Yes
   2. No Thank person and end interview

3. Are you willing to participate in the survey?
   1. Yes Thank person and end interview
   2. No Thank person and end interview

4. Is now a suitable time to conduct the survey?
   1. Yes Notes below
   2. No

5. When would be a convenient time to conduct the survey please?
   1. Response [SPECIFY DATE AND TIME]

2. Don’t know Thank person and end interview
3. Refused Thank person and end interview

(As necessary:)

a. "Thank you for agreeing to participate, or
b. Thank you. I’ll be back in touch at [SPECIFY DATE
   AND TIME]: ____________________________________________________________________.

c. During the interview, you may notice pauses whilst I write down your answers.
d. Should you have any concern about the manner in which this survey is conducted, please contact Mr Matthew Peake, Manager Waste Services, at Latrobe City Council on 1300 367 700.”

First, I will ask you about the asbestos removal job.

Asbestos removal job:

6. Did you use the kit to remove asbestos from the property?
   1. Yes Q8
   2. No
   3. Don’t know Thank person and end interview
   4. Refused Thank person and end interview
7 Are you able to say why you did not use the kit?
   1. COMMENT
   2. Don't know
   3. Refused
   **All responses: thank person and end interview**

8 What month and year was the job carried out?
   1. Month and year [SPECIFY]

   MM/YYYY
   2. Don't know
   3. Refused

9 How long did the dismantling and wrapping of the asbestos take?
   1. Number of hours or days [SPECIFY] #
   2. Don't know
   3. Refused

10 Was the asbestos removed from the interior or exterior of the building, or both?
   1. Interior
   2. Exterior
   3. Both
   4. Don't know
   5. Refused

11 What part of the building was the asbestos removed from?
   1. Asbestos removed from [SPECIFY]

   ____________________________
   2. Don't know
   3. Refused

12 How many people worked on the job?
   1. No. of people [SPECIFY] #
   2. Don't know
   3. Refused

**Kit and components:**

**Coveralls:**
13 How many pairs of plastic coveralls were used to do the job?
   1. Coveralls used [SPECIFY] #
   2. Don't know
   3. Refused

14 Did you find the coveralls comfortable?
   1. Yes
   2. No
   3. COMMENT

   ____________________________
   4. Don't know
   5. Refused

15 What did you do with the coveralls when you finished the job?
   1. Placed in asbestos removal bag
   2. Placed in waste bin
   3. Washed and kept
   4. Not washed and kept

   ____________________________
   5. Other [COMMENT]

   ____________________________
   6. Don't know
   7. Refused

**Gloves:**
16 How many pairs of disposable gloves were used to do the job?
   1. Gloves used [SPECIFY] #
   2. Don't know
   3. Refused

17 Did the disposable gloves break or tear?
   1. Yes
   2. No
   3. Don't know
   4. Refused

18 Did you use gloves other than those provided with the kit?
   1. Yes
   2. No
   3. Don't know
   4. Refused

19 Are you able to say why you used other gloves on the job?
   1. COMMENT

   ____________________________
   2. Don't know
   3. Refused

20 When you finished the job, did you throw away the gloves you used?
   1. Yes Q22
   2. No
   3. Don't know Q22
   4. Refused Q22

**Shoe covers:**
22 How many pairs of shoe covers were used to do the job?
   1. Shoe covers used [SPECIFY] #
   2. Don't know
   3. Refused

**Face masks:**
23 How many face masks were used to do the job?
   1. Face masks used [SPECIFY] #
   2. Don't know
   3. Refused

24 Did you have any problem fitting the mask?
   1. Yes
   2. Yes [WITH COMMENT]

   ____________________________
   3 No
   4. Don't know
   5. Refused

25 What did you do with the face masks when you finished the job?
   1. Placed in asbestos removal bag
   2. Placed in waste bin
3. Washed and kept
4. Not washed and kept
5. Other [COMMENT] ____________

6. Don’t know
7. Refused

Spray bottle:
26. Did you use the spray bottle to wet down the area you were working on?
   1. Yes
   2. No
   3. Don’t know
   4. Refused

27. Did you add the PVA solution to the spray bottle before using it?
   1. Yes
   2. No
   3. Don’t know
   4. Refused

28. Was the spray bottle effective in wetting down this area?
   1. Yes
   2. No
   3. Don’t know
   4. Refused

All responses Q30

29. Can you say why did you not use the spray bottle as part of the job?
   1. COMMENT ____________

   2. Don’t know
   3. Refused

Clear plastic bags:
30. Were the smaller plastic bags useful?
   1. Yes
   2. No
   3. No, not useful for asbestos
   4. No [OTHER COMMENT]

   5. Don’t know
   6. Refused

31. How many clear plastic bags were used to do the job?
   1. Small plastic bags used [SPECIFY] # ______
   2. Large plastic bags used [SPECIFY] # ______
   3. Don’t know
   4. Refused

Black plastic:
32. How many pieces of black plastic were used to do the job?
   1. Pieces of black plastic used [SPECIFY] # ______
   2. Other materials used to supplement black plastic [COMMENT] ____________

   3. Don’t know
   4. Refused

33. Did you cut a drop sheet from a larger piece of plastic as suggested in the DVD?
   1. Yes
   2. No
   3. Don’t know
   4. Refused

34. Which of the following best describes the black plastic supplied for the job? [INITIALLY READ OUT 2-4]
   1. Much too large
   2. Too large
   3. Just right
   4. Too small
   5. Much too small
   6. Don’t know
   7. Refused

General:
34a. Overall, did you find the items in the kit [READ OUT 1-37]
   1. Very useful Q35
   2. Useful Q35
   3. Some not that useful
   4. Don’t know
   5. Refused

34b. What items in the kit did you find the least useful? [CIRCLE THE LEAST USEFUL ITEM AND TICK ANY OTHERS MENTIONED]
   1. Black plastic wrap
   2. Small disposable bags
   3. Large disposable bags
   4. Disposable coveralls
   5. Face masks or respirators
   6. Overshoes
   7. Duct tape
   8. Barrier tape
   9. Warning stickers
10. Wipe down rags
11. Spray bottle
12. Disposable gloves
13. Don’t know Q35
14. Refused Q35

34c. Why do you believe those items were less useful?
   1. COMMENT ____________

   2. Don’t know
   3. Refused

35. Did anything in the kit not fit properly?
   1. Yes
   2. No
   3. Don’t know
   4. Refused

36. Can you say what and why?
   1. COMMENT ____________

   2. Don’t know
   3. Refused

37. Was there any breakage or tearing of the materials supplied in the kit?
   1. Yes
   2. No Q41
   3. Don’t know Q41
   4. Refused Q41
Access:

41 How did you learn that asbestos removal kits were available from the Latrobe City Council? 
1. Television 
2. Radio 
3. Print media 
4. Enquiry to council 
5. Enquiry to another council 
6. Enquiry to other agency 
7. Colleague, friend, family 
8. Other 
9. Don't know 
10. Refused

42 What difficulty, if any, did you have obtaining a kit? 
1. No problem 
2. Having to travel to Morwell 
3. Other [COMMENT] 
4. Don't know 
5. Refused

Knowledge:

43 Do you think it was useful to view the DVD and speak to council staff when collecting the kit? 
1. Yes Q45 
2. No 
3. Don't know Q45 
4. Refused Q45

44 Would you please explain? 
1. Could have watched DVD at home 
2. Other [COMMENT]

45 Did you watch the DVD again after collecting the kit? 
1. Yes 
2. No 
3. Don't know 
4. Refused

46 How would you describe the level of information provided through the DVD? [INITIALLY READ 2-4] 
1. Far too detailed 
2. Too detailed 
3. Just right 
4. Too little 
5. Far too detailed 
6. Don't know 
7. Refused

48 Which of the following best describes the change in your knowledge of asbestos handling by using the kit? [READ 1-3] 
1. Improved a lot 
2. Improved a bit 
3. Stayed the same 
4. Don't know 
5. Refused

48a Before handling the asbestos, did you read the DHS booklet Asbestos in the home? 
1. Yes 
2. Partly [COMMENT] 
3. No 
4. Don't know 
5. Refused

Some of the following questions were from information only provided in the DHS booklet.

49 Prior to commencement of the work, were neighbours advised to close their windows and doors? 
1. Yes 
2. No 
3. Not applicable 
4. Don't know 
5. Refused

50 If working outdoors, were all nearby windows and doors of the house closed, and nearby air vents covered whilst the work was being undertaken? 
1. Yes 
2. No 
3. COMMENT

51 If working indoors, was the work area isolated from the rest of the building by closing internal doors? 
1. Yes 
2. No 
3. Not applicable 
4. Don't know 
5. Refused

52 Did you ask family and friends to leave the immediate area before carrying out the job? 
1. Yes 
2. No 
3. Not applicable 
4. Don't know 
5. Refused

53 Did you spray and wipe down all surfaces to pick up dust and debris? 
1. Yes 
2. No
3. Don't know
4. Refused

54 Did you thoroughly wash your hands, and
shower and wash your hair after handling the
asbestos?
1. Yes
2. No
3. Don't know
4. Refused

54a Was all of the asbestos material disposed of at
the council landfill in Maryvale Road, Morwell?
1. Yes
2. No
3. Don't know
4. Refused

55 Did you experience any problems associated
with arranging the disposal, for example
transport or receiveal time?
1. Yes
2. No Q57
3. Don't know
4. Refused

56 What problems did you experience with
arranging the disposal?
1. COMMENT ____________________________
     [add comments]
2. Don't know
3. Refused

General satisfaction:

57 How satisfied were you with the kit supplied by
the council? [INITIALLY READ 2-4]
1. Very satisfied
2. Satisfied
3. Neutral
4. Dissatisfied
5. Very dissatisfied
6. Don't know
7. Refused

58 Would you recommend the kit to others?
1. Yes
2. No
3. Don't know
4. Refused

The price of $20 that you paid for the kit only
covers the disposal fee, and the kit was provided
free of charge as part of this trial project.

59 How much do you think it would cost to
purchase an equivalent kit from a hardware or
safety shop?
1. Response ________
2. Don't know
3. Refused

60 Did you believe the kit was worth the money
paid by you?
1. Yes
2. No
3. COMMENT ____________________________
4. Don't know
5. Refused

The purpose of this section is to obtain more
information about the people who have used the kit.

61 What was your age last birthday?
1. Age given # _____ years
2. Don't know
3. Refused

62 Record gender
1. Male
2. Female
3. Refused

Conclusion

Thank you for answering our questions. If you are
interested, I can arrange for a summary of the results
of the telephone interview to be mailed to you.

63 Would you be interested in receiving a
summary of the results of the telephone
interview?
1. Yes
2. No
3. Don't know
4. Refused

We expect we will need further feedback from users of
the kit, and that the best way to do this will be
through a focus group consisting of a small number of
people who have participated in this study. The focus
group will be drawn through a lottery-like process
from the names of people who have indicated their
willingness to be involved.

64 Would you be willing to have your name and
address placed in the pool for possible
involvement in the focus group? You will be
contacted only if your name is drawn.
1. Yes
2. No
3. Don't know
4. Refused

65 Have you any other comment you would like to
make regarding the kit and this study?
1. Yes
2. No
3. Don't know
4. Refused
5. COMMENT) ____________________________

This is the end of our questions.
Your answers to the questions will be added to those
of other participants and will not be kept in a manner
that your answers can be identified.

Again, thank you for your time. Goodbye
Appendix 7. Latrobe Council letter introducing evaluation

«Address»

Dear Resident

EVALUATION OF ASBESTOS IN THE HOME REMOVAL KIT

I am writing to advise that, during the next few weeks, you will be contacted by an officer of the Department of Human Services (DHS) in relation to the evaluation of the Latrobe City ‘Asbestos in the home Removal Kit’.

Our records indicate that you purchased a kit from Latrobe City Council and indicated your willingness to participate in the evaluation.

The main aims of the evaluation are:

to determine whether the ‘Asbestos in the Home Removal Kit’ program is having the intended impact in terms of reducing the risk of exposure to asbestos dust by people undertaking domestic asbestos removal jobs,
to identify areas for program improvement, and
to identify any challenges with implementing the program in areas outside Latrobe City.

You will be contacted by telephone in the coming weeks, and invited to participate in a telephone survey that will take around 15 minutes. While participation is completely voluntary, I would encourage you to participate so we have feedback from as many users of the kits as possible.

Any information you give will be completely confidential, and your answers will not be able to be identified. Please advise the officer who contacts you if you wish to be sent a summary of the results of the survey.

Should you have any concern about the manner in which this survey is conducted, please contact me on 1300 367 700

Yours sincerely

MATTHEW PEAKE
Manager – Waste Services
Appendix 8. Respondents’ final comments regarding the kit and the study

1. The kit was terrific. We were very pleased with it.
2. I would to congratulate the Council on this initiative. If it saves one life, it was well worth the effort.
3. Good idea, and a reasonable price.
4. I was put to unnecessary trouble to remove a few sheets from the back paddock
5. This was a great initiative. It would be handy if additional material was available though, for example, plastic.
6. It needs to be easier to dispose of material.
8. I’d like to thank the Council for doing it. The kit offers an opportunity for people in lower income groups to get rid of their asbestos.
9. We were happy with service and the kit. They were excellent.
10. I’m glad the kit was available. It teaches people about the proper disposal of a dangerous product
11. I am supportive. I think the evaluation will be worth while.
12. I was very impressed with the kit and how it was marketed. The advice was excellent. It should be available to everyone.
13. The whole idea of the kit and this survey were very good. The knowledge was also very useful.
14. I was overjoyed about how well it went. It enabled us to get rid of all of our asbestos in 2 weeks.
15. It seems okay.
16. The advertising was not too good. A lot of people haven’t heard about the kit and the low cost of doing the job yourself. I was quite amazed at how easy it was to do the job.
17. I am very appreciative of the Council for making the kit available. Congratulations to them. I am concerned though about a substitute product that looks like asbestos, and masks the risks in the community. It is not possible to tell which product is which without breaking them. The substitute product causes people to be blasé.
18. For starters, I recommend that Council put leather gloves in kit and better masks. I cut my hands doing the job because of the gloves provided. I would have paid $50 for a better kit. The kit saved me $1900 over the quote I received. I would like to thank the Council for providing the kit. It saved us a lot of money.
19. A brilliant initiative. I worked in industry with asbestos for many years as an electrician and, without being aware of the risks and safe practices, often drilled through it. The spray bottle should be standard equipment for electricians and in the electrical industry where workers are exposed to asbestos, eg. in EnergySafe Victoria and around switchboards.
20. There should be a test kit available to test for asbestos.
21. A perfect idea. A great thing that the Council has done. The more people that use this kit, the better.
22. The initiative was well devised and thought through. The information was useful and accurate.
23. We were very happy with the kit. Dealing with Peter was good.
24. Insufficient gloves. The rest was good.
25. No signage at Maryvale. The disposal site was not indicated very well.
26. Happy to do anything to help.
27. It was good to have it. It saved us a lot of money.
28. I was very happy with the service. It was very cheap. If more people knew about the service, more people would use the kit.
29. The kit was very valuable. A great asset. Hopefully, the kit will continue to be available.
30. A really good idea. It enabled us to do the job.
31. I’d recommend the kit to all.
32. A very positive experience.
33. The kit was pretty much aimed at indoor jobs. Not much information was provided for outdoor jobs.
34. A great initiative. It helps people to cope with an asbestos issue.
35. The kit was adequate for our job (bathroom) and suitable for a small job. The information from the Council was also good.
36. We found everything about the kit to be of the highest order. A really good initiative.
37. I think it was a very comprehensive DVD and kit.
38. There should be more awareness of the kit.
39. I would like to thank the Council. The kit enables people on lower income to dispose of their asbestos.
40. We were very impressed that the Council was providing this service.
41. It was all very good. Thank you. We needed to purchase extra material, and the kit gave us a good knowledge of what we needed to buy.
42. The kit was extremely worth while. More councils should have it.
43. Well done. Very appreciated. A great preventative measure. We have a friend who is dying of asbestosis.
44. A very helpful process.
45. We were very satisfied.
46. Our only recommendation is that more sturdy, durable gloves be provided with the kit.
47. The kit was fine. Ten out of ten. Access to testing is a problem. The minimum charge at a local laboratory is $400.
48. (A resident from Baw Baw Shire) Wished every Shire did this.
49. The DVD focussed on bathroom renovation, and did not cater for external work. The black plastic would be insufficient for most jobs.
50. I have strong views. The size and strength of the packaging was not sufficient. Needs to be as robust as the material it is to be used for. I recommend large tough black plastic bags with hessian or jute inner bags. The study is okay.
51. The kit made removal possible. It should stay available. It gives people the incentive and ability to do the right thing.
52. It was well done.
53. Additional advice should be included in the DVD or instruction sheet, for example about washing and showering.
54. Very helpful for what we needed to do. We are not certain that the material was asbestos, but we are happy that we were able to dispose of it safely.