

ENVIRONMENTAL ISSUES RELATING TO THE MOBILE INDUSTRY SECTOR

A report for the Swan Catchment Council

Prepared by Tom Clark

FINAL REPORT

September 2007

EXECUTIVE SUMMARY

Introduction

Research was conducted for Swan Catchment Council (SCC) into environmental issues relating to mobile businesses. The work was part of the SCC's National Pilot Project program, aimed at assisting SMEs in adopting better environmental practices.

Findings

Definitions and types

- There is no official industry classification or clear definition for mobile businesses.
- For the purposes of this review it is suggested that a mobile business is *One providing a skill, trade or other support service conducted wholly or partly at customer or other third party premises and*
 - *providing the a service of relatively short duration (one-off at the time although it may be repeated at regular intervals)*
 - *physically traveling to the customer's or third premises to provide the service*
 - *providing the service to many customers at many locations*
- There are many mobile business types by activity and main target market (commercial and domestic). The main service groupings for the purposes of this study are general and carpet cleaning services, mobile mechanics, pet grooming, pest controllers, garden services, building service maintenance. Some building and catering services may also be classified as mobile but were not included in this review.
- There are various types by business organisation: Larger SMEs and some listed companies (in the cleaning sector), smaller SMEs, owner operators, franchises, and mobile service units (multi-vehicle units serviced by a central depot).
- Larger businesses dominate the commercial market sector, especially in cleaning. Owner operators, small SMEs and franchises tend to be restricted to the domestic market e.g. in carpet cleaning, dog washing and car detailing.
- Franchising is significant in dog washing and has a presence in other activities. However, franchises are a fairly small part of mobile business numbers as a whole.

Sector studies and initiatives

- No published studies or reports have been identified specifically relating to mobile businesses as a sector while ABS or other statistics are limited in this area.
- Only one environmental initiative was identified relating to mobile industries as a whole: Conducted by NSW EPA and others in 2000-2002 the focus was on developing an educational program for small mobile businesses.
- There have been some, but limited, environmental initiatives relating to specific mobile industries: The EPAs of Victoria and South Australia have produced some best practice guidelines for carpet cleaners and dog washers; within WA guidelines have been produced for carpet cleaners, and mobile mechanics.
- In the pest control industry the Australian Environmental Pest Managers' Association is well established and a number of firms offer 'environmentally friendly services'. Across other mobile businesses sectors only one business was found which promotes its green credentials, suggesting a lack of interest, lack of demand or both.

Sector drivers

- GDP growth is the main underlying driver of growth as well as related factors, such as number and size of offices (generating commercial sector demand) and disposable incomes (influencing domestic sector demand).
- In WA employment opportunities in the resources sector is causing labour shortages in the cleaning industry and more generally causing some people to drop out of mobile business ownership. This plus saturation in some sectors suggests current slowing of growth in mobile businesses.
- Business trends and market factors influence demand in various sectors (e.g. contracting out of support services) and have influenced the growth of commercial cleaning and other services.
- Demographic and social factors play a part e.g. Population growth, the proportion of the population with higher incomes (the main users of mobile services); numbers of older people (influences demand for some domestic services e.g. gardening) and numbers of two-income households (time pressures influences demand for domestic mobile services).
- Some technology changes have influenced demand e.g. new detergents and cleaning materials although in general mobile services are labour intensive and low tech.

SME Numbers and growth

- There are no published or other statistics on numbers and trends for most types of mobile businesses and trends and figures must be estimated e.g. from Yellow Pages.
- There are probably 1400-1600 businesses providing some kind of mobile physical service in the Perth metro area (excluding building firms).
- Further growth will depend on future economic conditions.

Environmental issues

- Mobile businesses may give rise to various actual or potential environmental aspects and impacts. The main general issue is the potential risk to watercourses from waste water. Oily and other wastes are a concern relating to mobile mechanics while pest controllers and weed sprayers use hazardous substances; all activities use water and fuel and generate waste. Collectively these impacts are sufficiently significant to justify attention.

However, mobile business activities do not appear to be a major environmental concern:

- Most impacts are at the low rather than the high end of the significance spectrum.
- The most environmentally significant activities, pest control and air conditioning maintenance are already subject to operator licensing and specific regulations.
- None of the other activities have been identified by the DEC as being of such concern as to require controls or licensing beyond general regulations. The concentrations of pollutants and likely volumes going to stormwater are not regarded by DEC as major and most wastewater is believed to be discharged to lawns.
- Some relevant controls and initiatives are already in place e.g. *Environmental Protection (Unauthorised Discharges) Regulations 2004* and duty of care obligations regarding waste disposal; fines for breaches of regulations (albeit small) apply; in addition general environmental awareness initiatives among SMEs and the public and the high visibility of mobile services help to ensure responsible practice.

Opportunities for improvement and barriers

- There is likely to be some scope for improvement especially in reducing water use, disposal of waste water, use of alternative cleaning methods, disposal of waste oil (from mobile mechanics), waste reduction and recycling (e.g. of containers).
- There is likely to be most need for improvement amongst very small/owner operator firms where environmental/regulatory awareness may be relatively low, cost/financial pressures are high with higher temptation to cut corners, regulatory supervision is low, membership of trade associations is low or non-existent, participation in existing or past environmental programs is unlikely and there is little or no direct communication or information flow with external agencies.
- Only a few activities were identified which may need further consideration, taking into account the environmental significance assessments and existence of existing initiatives: General cleaners (non BCSSA), carpet cleaners, car detailers, dog washers and mobile mechanics.
- Various barriers to improvement were identified: Limited regulatory control and supervision (including no registration or planning controls), lack of professional or trade membership or codes, lack of domestic market demand for environmental performance, financial and competitive pressures discouraging spending on alternative equipment and attitudes/awareness – the environment does not appear to be high on the list of concerns for mobile businesses although most may aim to do the right thing

Strategic options

Options need to consider resources and effort required in relation to potential benefits and likelihood of success. The main options are as follows:

- No specific action: It could be argued that the environmental impacts of mobile businesses are small compared to businesses as a whole and to the domestic sector, and that existing controls, if not ideal, are adequate.
- Recommending or supporting the tightening or extension of regulations, including higher fines, surveillance and registration. However, there is likely to be resistance to such measures considering the cost and other issues in relation to the scale of the problem.
- Inclusion of mobile businesses into existing environmental programs for SMEs. This would require establishing suitable methods for identifying and communicating with mobile businesses e.g. through trade suppliers of materials.
- Creation of a market for greener services including encouraging public demand and developing Green Stamp or other badging for suppliers. While this may be feasible in the commercial market it is not apparent that there would be strong demand in the domestic market.

Recommendations

It is recommended that issues relating to mobile businesses are recognised but do not justify major effort and resources:

- Mobile businesses should be included in general initiatives and awareness for SMEs, including the issue of best practice guidelines.
- Responsible use of mobile service providers should be included in public education, as well as vigilance and reporting.
- If the Green Stamp Program, or similar, is extended to other sectors the opportunity for inclusion could be extended to mobile businesses.

CONTENTS

1. INTRODUCTION

- 1.1 This report
- 1.2 Background
- 1.3 Purpose and scope of the project
- 1.4 Conduct

2. FINDINGS

- 2.1 Definitions and types
- 2.2 Sector studies and initiatives
- 2.3 Sector drivers
- 2.4 SME numbers and growth
- 2.5 Environmental issues
- 2.6 Need and opportunities for improvement
- 2.7 Barriers to improvement

3. STRATEGIC OPTIONS

4. RECOMMENDATIONS

APPENDICES

- 1 Organisations and others contacted**
- 2 Further notes on mobile business definition**
- 3 Types of mobile business by sector and activity**
- 4 Mobile businesses by organisation type**
- 5 Sector studies and initiatives**
- 6 Sector drivers**
- 7 SME numbers and growth**
- 8 Environmental issues**
- 9 Environmental best practice**

1. INTRODUCTION

1.1 This report

This document is a report on environmental issues relating to the Small to Medium Enterprise (SME) Mobile Industry Sector. It has been prepared by Tom Clark for the Swan Catchment Council (SCC), in accordance with its consultant brief and request for tender (RFT).

1.2 Background

The SCC, through its Sustainable Production Program, is engaged in a National Pilot Project aimed at assisting SMEs in adopting better environmental practices. The pilot project focuses on SMEs, especially on businesses with 20 employees or less. The project scope does not include SMEs with Department of Environment and Conservation (DEC) licensed activities.

The major focus areas of the pilot project are to:

1. Prevent the discharge of pollutants to land and waterways and reduction of both illegal dumping and waste to landfill. The project will establish the most effective tools to achieve this outcome.
2. Encourage businesses to move to higher level best practices such as water and energy efficiency.
3. Establish and trial guidelines for development of new industrial estates
4. Investigate the role of the corporate sector in taking some responsibility for product life cycle.
5. The project will include consideration of how the model could be transferable to other states across Australia, and of how the model may be resourced and implemented on a long term sustainable basis.

Although the major part of the project is focusing on fixed premise businesses, consideration is also being given to the impacts and potential for amelioration of the impacts of mobile industries. In the context of this project, the SCC identified a specific need to research the mobile SME sector.

1.3 Purpose and scope of the project

This project investigates the issues and pressures that mobile SMEs face with respect to Natural Resource Management (NRM) issues, and will make recommendations on how to engage and encourage this group to use Best Management Practice (BMPs).

Specific tasks as stated in the RFT were to:

- Provide an overview of Western Australian, National and interstate initiatives and studies within government, corporate, academic and NGO sectors, associated with mobile SMEs. A desktop study was required complemented by communication with relevant entities to ensure accuracy and currency of information and data presented.
- Identify numbers of mobile SMEs in Perth/Western Australia by industry specific type, including potential growth and developments in terms of new industries, technologies

and geographical coverage. Projected industry growth was supported by data including socio-economic population trends, typical industry growth patterns and case studies.

- Identify and prioritise the issues and pressures associated with mobile SMEs in terms of environmental impacts (by industry type).
- Identify 10 priority mobile industries based on the above investigations, and confirm or amend such target industries in consultation with the Swan Catchment Council Program Manager. Specifically the RFT required the study to
 - Identify and quantify environmental impacts associated with upstream supply processes, transport, water and air quality impacts and waste management issues for target mobile SMEs.
 - Identify barriers and responding opportunities to improve environmental performance within the target SMEs, including a comparison of environmental performance and opportunities for individual operators, as compared to multi operator companies and franchised businesses.
- Provide recommendations for the development of solutions to environmental impacts, and progressing the adoption of BMPs for this sector, including identifying key stakeholders and providing innovative, sustainable, feasible and logically supported recommendations with all responsibilities clearly defined and costs estimated.

At the opening meeting it was agreed that the work would not include building and construction and food catering services since these are part of other reviews or are often operated from fixed or temporary sites rather than being mobile businesses. However an open mind was kept in order to identify any issues not being adequately addressed by other initiatives.

The practical focus throughout is on industries which may be creating an environmental problem or risk which requires attention. While all environmental issues are considered, the emphasis is on waste water, liquid and solid waste and use of energy and water.

1.4 Conduct

Work conducted included:

- A web and literature search, including a search by Alexander Library.
- Telephone discussions with governmental and other agencies.
- A visit to Small Business Development Corporation (SBDC) to review IbisWorld subscription market reports.
- Meetings with key industry associations.
- Identification of mobile businesses and estimation of numbers from Yellow Pages.
- Telephone discussions with and some direct observation of sample of small businesses.
- Analysis of environmental impacts.
- Submission of an Interim Report for review by SCC (on 10 July 2007).

Organisations and others contacted are listed in Appendix 1. For open discussion the businesses spoken to are not named in this report but noted separately.

2 FINDINGS

2.1 Definitions and types

a) There is no official industry classification or definition for mobile businesses.

- The Australian Bureau of Statistics (ABS) does not identify mobile businesses as a distinct sector and such businesses have been little studied as a business type.
- The NSW Environmental Protection Agency (EPA), in work undertaken during 2000-2, identified a mobile business as *'any business that does not operate from a fixed location'*.
- A narrow definition would be a business **without** fixed office or depot premises. In this case, mobile businesses would include only owner operators operating from home and providing services mainly to the domestic sector. However, there are many businesses which are mobile which operate from premises, are larger in size and service the commercial sector (e.g. many cleaning firms). Some businesses provide fixed location as well as mobile services (e.g. some automobile mechanical services).
- A broader definition would include all services delivered **at** customers' premises rather than from fixed premises. In this case, however, the sector could be taken to include delivery, utility, and building and construction companies and services. Such businesses would not normally be viewed as mobile businesses. It would also include contract cleaners which are resident on customers' premises and effectively not mobile.
- For the purposes of this review it is suggested that a mobile business is *One providing a skill, trade or other support service conducted wholly or partly at customer or other third party premises and*
 - *providing the a service of relatively short duration (one-off at the time although it may be repeated at regular intervals)*
 - *physically traveling to the customer's or third premises to provide the service*
 - *providing the service to many customers at many locations*
- This definition distinguishes mobile services from most other types of service. However, in some sectors such as cleaning, building services maintenance and building contracting there is no well-defined boundary between mobile and semi-fixed location business activities by virtue of duration or scale of contract or numbers of customers.

Further notes on definition are set out in Appendix 2, with suggested inclusions and exclusions.

b) There are many mobile business types by activity and main target market (commercial and domestic)

All types of possible mobile service have been identified for completeness although some types (building, food and catering) were (as noted above) excluded from further consideration in this study and some, such as mobile professional or other services are not a specific environmental concern.

- The main general service groupings are cleaning services, automotive, pet grooming, pest controllers, garden services, building service maintenance, building, equipment maintenance, domestic services, food and catering, and professional services.
- Some services are only provided to commercial customers (e.g. facilities management) and some only to domestic customers (e.g. pet grooming). Most may be provided to both types of customer although (as shown below) the commercial sector is much larger than domestic across the sector as a whole.
- Most involve some form of physical or technical activity involving equipment and materials; some are non-material services.
- Some types of business activity are by their nature 'mobile services', for example most contract cleaning. Some may be carried out as mobile or fixed activities, for example dog washes and mechanical services.
- Mobile businesses broadly fit into two categories 'traditional' and 'new'.
 - Traditional mobile businesses offer services that have always been site based, such as carpet cleaning, painting and decorating, pest control and gardening.
 - New mobile businesses, such as mobile mechanics and dog washers, offer services that were once only available through a workshop or trade outlet.

The main types are summarised in Appendix 3.

c) There are various types by business organisation

Mobile businesses fall into various categories by business type, depending on the sector or activity:

- Larger SMEs and some listed companies.
- Smaller SMEs.
- Owner operators.
- Franchises e.g. Flea Stoppers (dog grooming service).
- Mobile service units (multi-vehicle units serviced by a central depot) e.g. Lube Mobile.

The relative importance of the various types depends on the activity:

- Businesses in the commercial general/carpet cleaning sector are diverse by size but larger businesses dominate the sector by scale of income and activity; smaller SMEs and owner operator cleaners tend to be limited to the smaller commercial and domestic premises.
- Mobile dog washing is entirely conducted by owner operators or individuals operating under franchises.
- Mobile car detailing/washing is mainly conducted by owner operators, but franchises have made some inroads into the activity.
- Pest control is mainly undertaken by small and larger SMEs.
- Lawn mowing is mainly conducted by owner operators but there are some franchises which offer other garden maintenance services.
- Mobile mechanics tend to be specialist owner operators, garages offering a mobile alongside fixed service, or mobile service units.

Franchising has played an important part in the growth of small businesses as a whole and has contributed to the growth of mobile businesses. Franchising is significant in dog washing activities e.g. more than half of mobile dog washers are franchisees with Flea Stoppers having 30 and both Aussie Pooch Mobile and Hydrodog having around 10 franchisees. There are some franchised businesses in other sectors (e.g. Care Care, Ecowash and Tidy Car car detailing and washing, ChemDryAmazing and Electrodry carpet cleaning and Jim's Mowing in garden services). However, franchises are a fairly small part of mobile business numbers as a whole, and in some activities, such as mobile mechanics, there are do not appear to be any franchised operations. A number of owner operators spoken to had tried franchising in the past but found that the high upfront costs, royalty payments and often uncompetitive service prices tended to outweigh any benefits. Franchising appears to be mainly confined to niche services where there is specialist techniques, equipment or chemicals e.g. Ecowash waterless car cleaning.

Characteristics of mobile businesses are summarised in Appendix 4.

2.2 Sector studies and initiatives

a) *No published studies or reports have been identified specifically relating to mobile businesses as a whole.*

ABS, IbisWorld and other statistics provided some general relevant indicators e.g. for property and personal services and for some sectors such as cleaning and pest control but there are no specific statistics for mobile businesses. There has been no apparent academic interest apart from research into womens' employment issues relating to home-based businesses, which can include mobile businesses. Home-based businesses are recognised as an employment growth opportunity, especially for women and studies have focused on barriers and needs for business support. In general, however, most home-based businesses would not be classed as mobile and those that are, such as mobile hairdressers, do not have significant environmental issues beyond those of households.

Notes available information obtained are provided in Appendix 5.

b) *Only one environmental initiative was identified relating to mobile industries as a whole*

- Conducted by NSW EPA in 2000-2002 in cooperation with Marrickville Council and Resource NSW, the focus was on developing an educational program for small mobile businesses and the result was a resource pack and best practice guidelines for various activities, including carpet cleaning, dog washing, gardening services, mobile mechanics and pressure cleaning (downloadable and summarised in Appendix 9).
- Discussions with NSW EPA found that target activities were selected by judgement of potential environmental risk, especially of discharges to storm water systems. There was no accompanying study or report.
- The issue is regarded by NSW EPA as having been addressed as far as possible and no further work has been done in the area which is seen as low risk compared to other industries. There have since been some changes in regulations which restrict the use of fresh water for some cleaning operations.

c) *There have been some, but limited, environmental initiatives relating to specific mobile industries*

- In addition to NSW EPA, the EPAs of Victoria and South Australia have produced some best practice guidelines for carpet cleaners and dog washers.
- Within WA there have been cleaner production, Green Stamp and other environmental initiatives by the cleaning industry.
- MTA has produced a best practice note for mobile mechanics (although none have so far signed up to the Green Stamp program).
- In the pest control industry the Australian Environmental Pest Managers' Association is well established and a number of firms offer 'environmentally friendly services'. 11 out of 40 large advertisements in Yellow Pages offer environmental services or reference their AEPMA membership.
- Across other mobile businesses sectors only one business (Ecowash Mobile car detailing, as noted above a franchised operation) was found which promotes itself as environmentally friendly.

2.3 Sector drivers

1) *GDP growth is the main underlying driver of growth as well as related factors*

- Economic growth: Generates aggregate need and demand for services.
- Number and size of offices: Influences demand for services to the commercial sector.
- Disposable incomes: Influences demand for domestic services (mostly provided to higher income groups).

NB

- In WA employment opportunities in the resources sector is causing labour shortages in the cleaning industry and generally causing people to drop out of mobile and other small business ownership. This plus saturation in some sectors suggests current slowing of growth in mobile businesses.

b) *Business trends and market factors influence demand in various sectors*

- Contracting out of support services has influenced the growth of commercial cleaning and other services.
- Relatively low barriers to entry have enabled rapid growth, although at the same time this is also a factor in possible over-supply and intense price competition.
- The growth of franchising has facilitated the spread and uptake of some types of service, especially where there is an innovative product and ongoing support.

c) *Demographic and social factors*

- Population growth: Demand for mobile services to the domestic sector is driven less by population itself, but by the proportion of the population with higher incomes – these are the main users of such services.
- Growing numbers of older people may influence demand for some domestic services e.g. gardening.
- Increasing numbers of working women and increased numbers of two-income household increase time pressures and increase demand for domestic mobile services.

d) *Some technology changes have influenced demand*

- Technology has had some if not major influences (most activities are fairly labour intensive) e.g. new detergents and cleaning materials;
- Some new technologies may help to create new market demand which did not previously exist e.g. wheelie bin washing vehicles generating demand for bin cleaning services.

2.4 SME Numbers and growth

1) *There are no published or other statistics on mobile business numbers and trends: Figures must be estimated*

- Estimates of numbers for the Perth Metro area are have been made from Yellow Pages, and, where relevant, speaking to industry/trade associations and franchise organizations.
- If all lawn mowers are included and building activities excluded, there are probably 1400-1600 businesses providing some kind of mobile physical service (see Appendix 7 for breakdown).

However, the numbers are uncertain:

- Industry/ trade associations only have members' numbers and only have rough ideas of non-member numbers.
- Many activities do not have an industry/trade association.
- Businesses relying on referral do not tend to advertise and where they do, may not use Yellow Pages. Mail drops and local newspapers are often used by small operators.
- Yellow Pages and other information sources will often be out of date and entries may include double entries.
- There is typically a high turnover rate of businesses, especially among owner operators.

b) *There has been rapid sector growth in recent years*

Appendix 7 shows national growth figures for cleaning, garden and pest control which have been in line with GDP growth. Growth in WA has probably been higher still.

c) *Projected sector growth*

- In the short term, growth of mobile businesses should reflect trends in recent years, although with steadier rather than the rapid growth seen when some types were relatively new.
- Some new types may appear and grow rapidly where they meet a particular need but none were identified which may immediately show spectacular growth.
- In the medium to longer term growth will depend on what happens globally and its impacts on the mining and building sector, and on the domestic economy generally.
- If there is a downturn in the economy there is likely to be a decline in general mobile business activity although, as noted above, there may be a short term increase in start-ups as mining and other employment opportunities decline.

- Environmental factors may influence future growth generally and in specific sectors e.g. water restrictions may increase demand for waterless alternatives.

See Appendix 6 for further notes

2.5 Environmental issues

a) ***Mobile businesses may give rise to various actual or potential environmental aspects and impacts.***

- The main general issue is the potential risk to watercourses from waste water from various cleaning services, car detailing and dog washes.
- Oily and other wastes are a concern relating to mobile mechanics.
- Pest controllers and weed sprayers use hazardous substances.
- Most activities generate containers and other waste; building work generates building waste.
- Cleaning activities are significant water users.
- All activities use fuel and some use power.
- Some activities generate air emissions e.g. from solvent use or potential release of ozone depleting substances (air conditioning maintenance).
- Some have noise issues.

Issues are summarised in Appendix 8, including an assessment of significance.

b) ***Individual mobile business activities do not appear to be a major environmental concern***

Collectively the actual and potential impacts of mobile businesses are of sufficient significance to be worth addressing, although most are at the low or medium/low rather than the high end of the significance spectrum.

However:

- The most environmentally significant activities, pest control and air conditioning maintenance are already subject to operator licensing and specific regulations.
- None of the other activities have been identified by the DEC as being of such concern as to require controls or licensing beyond general regulations.
- Even the most significant activity with respect to volumes of waste water, carpet cleaning, is not regarded as a major problem. It is believed that a study of carpet cleaning waste water was conducted in the late 1990s and found that pollutant levels were very low in samples examined. Information on this study was requested from the DEC information sections but it has not yet been located.
- Volumes of water use and wastewater are significant across mobile industries as a whole. For example if each dog washer washes 10 dogs a day and uses 15 litres of water per wash, then the estimated 80 businesses use and discharge over 2.5 million litres a year. This might be problem if concentrated detergents and flea rinses were discharged to storm drains. However concentrations are low and most wastewater is likely to be discharged to lawns where the impact is likely to be low.

- There may be a detergent discharge issue relating to water-using car detailers, although the concentrations in materials used (Able is the main supplier to car detailers in Perth) appear to be low and the volumes low compared to car washing by households. Detailers spoken to were aware of the risks of fines and avoided engine cleaning which might generate oily waste water.
- Backwash water from pool cleaning is not regarded by DEC as constituting a significant environmental risk. However, although chlorine levels are low and the chlorine is rapidly dispersed, discharge to storm drains is not advocated.
- Overall, the environmental risks and impacts are small compared to other industries, SMEs as a whole and households as a whole;

Water use may become a significant issue for the more water-intensive activities (as well as an opportunity for those with low or water-free technologies).

c) Some relevant controls and initiatives are already in place

- General regulations apply to polluting activities e.g. *Environmental Protection (Unauthorised Discharge) Regulations 2004* and duty of care obligations regarding waste disposal; fines for breaches of regulations (albeit small) apply.
- Licensing and training requirements apply to pest controllers, weed sprayers air conditioning maintenance and mobile mechanics.
- General programs for SMEs may reach those firms with premises, especially larger SMEs and those which are members of trade associations e.g. cleaners and motor mechanics.
- There is greater public awareness than in the past about the importance of protecting water courses and river systems as a result of public education and awareness programs.
- Responsible business customers will require contractors to do the right thing.
- Some developments and improvements in technologies are contributing to environmental improvements in some industries e.g. the Environmental Pest Controllers Association promotes integrated pest management to reduce the use of chemicals; waterless car cleaning methods are available although there are mixed opinions on their effectiveness; biodegradable detergents are commonly used by car detailers although the impact of these needs to be clarified.

Follow-up investigation was conducted into requirements and issues relating to pest controllers and weed sprayers:

- All operators must be licenced through the Department of Health. Licencing requires competency to the appropriate level (to operate under or without supervision) through Challenger TAFE. Any breach of regulations affecting human health is subject to action by the Department of Health. Any breach of regulations or contractual requirements affecting fauna or flora is dealt with by the relevant Council, CALM or other relevant agency.
- The case of tree deaths in Wembley Downs related to the use of hexazinone herbicide which had been sprayed into stormwater drainage sumps and subsequently affected nearby tree roots. The spraying had been agreed by the contractors and City of Stirling and had been undertaken before with different herbicides without apparent harm. The consequences of using hexazinone were not anticipated. The practice has since been discontinued and the case appears to have been a specific incident of inappropriate weed management rather than indicative of a wider environmental concern.

2.6 Need and opportunities for improvement

a) *There is likely to be some scope for improvement* especially in

- Reducing water use.
- Disposal of waste water.
- Use of alternative (low water, low chemical/detergent) cleaning methods.
- Disposal of waste oil (from mobile mechanics).
- Waste reduction and recycling (e.g. of containers).

b) *There is likely to be most need for improvement amongst very small/owner operator businesses* where

- Environmental/regulatory awareness may be relatively low.
- Cost/financial pressures are high with higher temptation to cut corners.
- Regulatory supervision is low.
- Membership of trade associations is low or non-existent.
- Participation in existing or past environmental programs is unlikely.
- There is little or no direct communication or information flow with external agencies.

c) *Only a few activities were identified for further consideration*

Taking into account the environmental significance assessments and existence of existing initiatives, the following activities were identified for further consideration:

- General cleaners (non BCSAA).
- Carpet cleaners.
- Car detailers.
- Dog washers.
- Mobile mechanics.

Other mobile activities are either less environmentally significant (e.g. pool cleaning) or addressed through existing initiatives (e.g. pest control).

2.7 Barriers to improvement

Various barriers to improvement were identified:

a) *Limited regulatory control*

- Except for pest control and certain automotive activities, regulatory controls are generally limited. Although fines apply to illegal discharges to storm drains the levels and likelihood of enforcement are low.
- No registration or planning controls apply to mobile businesses so that it is difficult to track businesses, supply information or impose obligations.

b) *Lack of professional or trade membership or codes*

- Mobile business activities typically have no professional or trade bodies which can impose standards and even where such bodies exist, membership is not obligatory and is typically low amongst owner operators.

c) Lack of market demand for environmental performance

- While there is some green procurement by the business sector, most small mobile businesses serve the domestic sector where there is little evidence of procurement for environmental reasons. The lack of mobile businesses promoting their green credentials may be indicative of a lack of market demand from the domestic sector.

d) Financial and competitive pressures

- Mobile businesses appear to be under intense price competition and financial pressures and, unless forced by regulation, appear to be unlikely to invest in any environmental measures which might affect their profitability, especially if there is no perceived market benefit. It is unlikely that mobile businesses would use some of the equipment recommended in the NSW EPA guidelines (Appendix 9), for example bunds and collection tanks, unless it was required by law or levels of fines were much higher.

e) Technology

- Mobile businesses are generally manual and relatively low tech, which limits the scope for technological breakthroughs. Where there have been improvements, as with waterless/low chemical cleaning, the effectiveness of such methods is not proven.

f) Attitudes/awareness

- While most operators may be reasonably responsible and aware of general environmental obligations, it was not apparent that environmental awareness and interest was high on the list of concerns of operators spoken to or to operators they knew.

'It's not my job to save the planet' (dog washer with an advertisement claiming to use soap-free detergent)

'I try to do the right thing (with waste oil) but there are some who might cut corners' (mobile mechanic)

'It's hard to stop water going down the (storm) drain.....but the detergent is biodegradable'

'The water board has said to put it (backwash) down the storm drain.....it's a grey area' (pool maintenance firm)

- There is anecdotal evidence of carpet cleaners and dog washers having, in the past, discharged waste water to storm drains in Armadale where steep gardens make it difficult to discharge to lawns. In this case however, residents have reported the offenders since the wastewater was going directly into the nearby brook. This level of public vigilance is encouraging.
- The MTA reported no interest in Green Stamp accreditation among mobile mechanic members although this may reflect lack of interest or perceived benefit in the scheme rather than general environmental interest.

3. STRATEGIC OPTIONS

From the above analysis it is not apparent that mobile business activities represent an area of major environmental concern. However consideration should be given to options for future action by SCC which are discussed here. Options need to consider resources and effort required in relation to potential benefits and likelihood of success.

a) *No specific action*

It could be argued that:

- The environmental impacts of mobile businesses are small compared to businesses as a whole and to the domestic sector.
- Existing controls, if not ideal, are adequate.
- Most mobile business operators are likely to be at least aware of basic obligations not to pollute and are likely to be discharging wastewater (which is not highly concentrated) to lawns where possible.
- The minority of 'cowboy' operators who are not aware/do not care by now are probably beyond education and likely to be only controlled by regulations and risk of fines.

b) *Recommending or supporting the tightening or extension of regulations*

While not engaged in regulation itself, SCC could recommend or support the tightening of existing regulations or extension of regulatory controls, especially to weed out the poorer performers. Measures might include:

- Increased fines and/or increased provision for on-the-spot fines: the existing provisions in WA are for \$250 fines and later issuance compared to \$1500 on-the-spot fines in NSW;
- Increased engagement and consistency of local authority environmental/EHO or other officers in surveillance and fines: existing processes vary between authorities.
- Registration of mobile businesses with environmental risks through local authorities, with environmental conditions attached.
- Additional regulations requiring the containment of wastewater and subsequent discharge to sewer.

While there are likely to be some environmental benefits, it is not clear that the scale of any problem is sufficient to justify additional regulation or that there would be resources to enforce it. There could be resistance from DEC and local authorities when considering other priorities. The DEC estimated that only about 1-2% of liquid waste spills reported to the Agency (around 20 a year) come from mobile businesses.

c) *Inclusion of mobile businesses into existing environmental programs for SMEs*

As a category or type of SME, mobile businesses could be targeted for inclusion in general programs for SMEs e.g.

- Information and awareness e.g. issue of guidelines based on those produced by NSW and building on that produced by DEC for carpet cleaners.
- Promotion of cleaner production, including alternative technologies such as waterless cleaning and wastewater containment.

- Support for waste recycling e.g. provision of waste oil collection and container recycling facilities on industrial estates.

d) Creation of a market for greener services

There are two parts to this:

- Creating demand: providing guidelines to households on choosing and using environmentally friendly mobile services (and encouraging the reporting of poor practice seen).
- Encouraging supply: extending Green Stamp (or other brand name) accreditation to mobile services. Such an approach could provide a positive, market incentive for environmental best practice but it is not clear that there would be strong demand from either the market or operators at this point.
- Supply and demand initiatives would need to go hand in hand and such environmental badging would require a strong marketing and promotional effort which would not be cheap.

4. RECOMMENDATIONS

It is recommended that issues relating to mobile businesses are recognised but do not justify major effort and resources:

- Mobile businesses should be included in general initiatives and awareness for SMEs, including the issue of best practice guidelines
- Responsible use of mobile service providers should be included in public education, as well as vigilance and reporting.
- If the Green Stamp Program is extended to other sectors the opportunity for inclusion could be extended to mobile businesses.

APPENDIX 1: ORGANISATIONS AND OTHERS CONTACTED

1. WA Department of Environment and Conservation (DEC) (Pollution Response Unit and Swan River Trust).
2. WA Department of Industry and Resources (DoIR).
3. Small Business Development Corporation (SBDC).
4. WA Department of Health.
4. Australian Bureau of Statistics (ABS).
5. New South Wales Environmental Protection Authority (NSW EPA).
6. Motor Traders' Association (MTA) (meeting with Natalie Sharp).
7. Building Services Contractors Association of Australia (BSCAA) (meeting with Ian Westoby).
8. Telephone discussions, and some observations, of a sample of practitioners in carpet cleaning, car detailing, dog washing, mobile mechanical services, pool cleaning, pest control and pool cleaning.

APPENDIX 2: FURTHER NOTES ON MOBILE BUSINESS DEFINITION

1. Table A1 illustrates activities which would be classed as mobile according to the definition in the Report and those which are generally would not.

Table A1: General characteristics of mobile businesses

Generally includes	Generally excludes
<ul style="list-style-type: none"> • Services to businesses customers provided at commercial premises • Personal services provided at customers' homes 	<ul style="list-style-type: none"> • Products or services provided at supplier's premises. • In-house commercial services
<ul style="list-style-type: none"> • Physical or other support or maintenance service activities 	<ul style="list-style-type: none"> • Capital works delivered at customers' premises over extended periods • Utility, IT information services delivered at customers' premises but provided mainly remotely via transmission, communication, mail or other facilities.
<ul style="list-style-type: none"> • Contract cleaning services 	<ul style="list-style-type: none"> • In-house cleaning services
<ul style="list-style-type: none"> • Building facilities maintenance services • Home handyman or building repair services • Mobile paint spraying services 	<ul style="list-style-type: none"> • Building and construction works
<ul style="list-style-type: none"> • Equipment maintenance and servicing 	<ul style="list-style-type: none"> • Delivery and installation services for products produced elsewhere
<ul style="list-style-type: none"> • Contract gardening services 	<ul style="list-style-type: none"> • Major landscaping contracts • In-house catering
<ul style="list-style-type: none"> • Office and home catering where the cooking takes place at the customer's premises and is one-off • One-off or sporadic visits by catering trucks 	<ul style="list-style-type: none"> • Daily in-house or contract catering • Catering trucks operating at fixed locations
<ul style="list-style-type: none"> • The mobile part of any business offering a fixed and mobile service e.g. some mobile mechanics and dog washers (mobile businesses may operate from home or from a depot) 	<ul style="list-style-type: none"> • All fixed location supply elements of a service

2. A market and functional definition of the sector is that customers choose the mobile support service as an alternative to
 - traveling to a service provider's premises to receive the service
 - in-house provision (commercial customers)
 - DIY (domestic customers).
 These features are important when considering drivers and growth of the sector.
3. When considering environmental issues, a mobile business is one whose main environmental aspects and impacts arise from the mobile activity and at customers' or third party premises rather than their own premises. Some aspects, risks and impacts may, however, relate to practices at other locations e.g. mobile mechanics may contribute to impacts at roadside locations and owner operators appear to commonly store waste oil at domestic premises.

Note

While recognising the broader categories of mobile business there is an argument in the present study for focusing on home-based owner operators

- Whether through lack of awareness or deliberately there may be more temptation or risk of environmental short cuts by such businesses e.g. disposal of small quantities of waste illegally, or illegal discharge to storm drains.
- Such businesses typically have no industry or trade affiliation, and often there are no licensing, professional/trade qualification requirements or codes of practice. They will often not be reached by existing environmental or other programs for SMEs.
- Businesses with premises may be more readily covered by existing programs for SMEs, especially where they have trade and industry affiliations.

APPENDIX 3: TYPES OF MOBILE BUSINESS BY SECTOR AND ACTIVITY

Table A2 illustrates the wide range of service types

Table A2: Types of mobile service by sector and activity

General service type	Mobile activities	Commercial	Home
Cleaning services	<ul style="list-style-type: none"> • General cleaners • Carpet cleaners • Upholstery cleaners • Pressure cleaners • Window cleaners • Pool cleaners • Roof cleaners • Wheelie bin cleaners 	<ul style="list-style-type: none"> x x x x x x x x 	<ul style="list-style-type: none"> x x x x x x x x
Automotive	<ul style="list-style-type: none"> • Mobile mechanics • Car detailers 	<ul style="list-style-type: none"> x 	<ul style="list-style-type: none"> x x
Pet grooming	<ul style="list-style-type: none"> • Mobile dog washers 		<ul style="list-style-type: none"> x
Pest controllers	<ul style="list-style-type: none"> • Pest destruction • Building treatment 	<ul style="list-style-type: none"> x x 	<ul style="list-style-type: none"> x x
Garden services	<ul style="list-style-type: none"> • Mowing • Landscaping/plants • General maintenance 	<ul style="list-style-type: none"> x x x 	<ul style="list-style-type: none"> x x x
Building services maintenance	<ul style="list-style-type: none"> • Facilities maintenance • Electricians • Plumbers • Gas plumbers • Air con systems 	<ul style="list-style-type: none"> x x x x x 	<ul style="list-style-type: none"> x x x x x
Building maintenance/refurbishment	<ul style="list-style-type: none"> • Handymen • General builders • Plasterers • Painters and decorators • Concreters • Floor sanders • Concrete cutters 	<ul style="list-style-type: none"> x x x x x x x 	<ul style="list-style-type: none"> x x x x x x x
Equipment/systems installation/maintenance	<ul style="list-style-type: none"> • Computer • Telecoms • General equipment (TV, kitchen etc) 	<ul style="list-style-type: none"> x x x 	<ul style="list-style-type: none"> x x x
Other domestic	<ul style="list-style-type: none"> • Home helps (cooking, ironing, nannying, babysitting) • Home hairdressing 		<ul style="list-style-type: none"> x x
Food and catering	<ul style="list-style-type: none"> • Catering services (e.g. lunches, functions, parties) • Catering trucks 	<ul style="list-style-type: none"> x x 	<ul style="list-style-type: none"> x
Professional services	<ul style="list-style-type: none"> • Consultancy • Training • Tuition • Accounts/bookkeeping 	<ul style="list-style-type: none"> x x x x 	<ul style="list-style-type: none"> x

APPENDIX 4: MOBILE BUSINESSES BY ORGANISATION TYPE

Mobile businesses fall into various categories by business type, depending on the sector or activity, as shown in Table A3

Table A3: Types of mobile service business type

Type	Characteristics
Larger SMEs and some listed companies	<ul style="list-style-type: none"> • Significant numbers of employees and casuals • Multi site • Mainly commercial/government/institutional customers • Registered with industry association/ following industry codes • Trained operators and sometimes ISO 9001 certified <p>Examples: Larger contract cleaners</p>
Small SMEs	<ul style="list-style-type: none"> • Small but some employees • May operate from manager's home or from a base • May serve commercial and domestic markets <p>Examples: Smaller contract cleaners</p>
Owner operators	<ul style="list-style-type: none"> • Individual operators operating from home on a full or part-time basis • advertise in the local papers. • may or may not be trained. • Many are not members of trade associations. • Mainly serve the domestic market <p>Examples: Most mobile dog washes</p>
Franchises	<ul style="list-style-type: none"> • The operator buys a franchise share from the central company. • The support a franchisee receives from the parent company varies enormously, but may include a business model, initial training, shared marketing, a telephone answering service, and ongoing support and training. • Some master franchises have very little ongoing contact with the operators once they have purchased their franchise, while others provide regular training evenings. <p>Examples: Jim's Mowing, Flea Stoppers</p>
Mobile service units	<p>These businesses have a central depot that services and coordinates mobile units</p> <p>Examples: Mobile mechanics, Lube Mobile</p>

APPENDIX 5: SECTOR STUDIES AND INITIATIVES

The following reports and statistics were reviewed as providing some relevant indicators:

1. ABS statistics for

- property and business services
- personal and other services
- construction

Mobile industries come under these broad classifications and aggregate statistics but are not classed separately except where sub-sectors are almost entirely mobile e.g. pest control and cleaning services

2. ABS statistics for home-based businesses:

- provide indicators for the growth of businesses conducted at home as well as -from home but provide some information on businesses conducted from home
- include all professional, trade and other services
- do not separately identify specific services
- are mainly for Australia as a whole but provide some State indicators

3. Ibisworld market reports

Market reports were reviewed for the following sub-sectors:

- Cleaning services
- Pest control
- Gardening services
- Building (contains some information on maintenance activities)

These provide employment, value, growth and other statistics as well as industry analyses for Australia as a whole but with some highly aggregated estimates for the WA share.

4. Academic and other reports: The only related sector identified as the subject of academic interest appears to be home-based businesses. This sector is widely recognised as an important area for creating employment, especially part-or full time opportunities for women. Academic studies tend to be on gender issues and needs for support in start-ups.
5. Unpublished studies and reports: Clarification was sought from industry associations regarding whether any unpublished industry studies have been conducted or reports produced. So far, no specific studies have been identified.
6. No specific environmental studies have been yet identified regarding the impacts of the mobile sector as a whole or sub-sectors within it. Ian Westoby stated that some analysis of carpet cleaning waste water was done in the late 1990s and this found pollutant levels to be very low. The specific study has yet to be identified

APPENDIX 6: SECTOR DRIVERS

Economic growth

- Overall demand is strongly driven by economic growth generating aggregate need for services, and then by time and cost pressures which give advantage to mobile compared to fixed or self provision.
- Demand for services to the commercial sector is closely related to the number and size of offices which is proportional to commercial growth and growth in the overall economy (GDP growth was 9% for WA in the year to March 2007).
- Demand for services to the domestic sector is closely related to disposable incomes, numbers of two income households and to house prices (a perceived wealth indicator) which have been rising in line with the economic growth.
- Relatively low capital, skill and professional barriers to entry for most mobile services mean that numbers of operators can grow rapidly in response to short demand (i.e. no significant lag between economic and service growth).
- Demand for mobile services can be related to population growth but only because WA population growth is being strongly driven by growth in the economy and in incomes. Demand for mobile services to the domestic sector is driven less by population itself, but by the proportion of the population with higher incomes – these are the main users of such services.

NB

- It should be noted that sub-sector growth does not follow economic growth in every case and more detailed analysis is needed when considering specific trends and projections. For example SBDC estimates a fall in business activity in personal services for 2007-2008 due to high employment and wages opportunities in the mining sector causing people to choose employment before self employment.
- This situation was confirmed in discussions with a member of the Lawn Mowers Association which has seen significant numbers of operators leaving the business to work in the mining sector. Lack of demand for rounds has resulted in their value falling to around 70% of their value 2-3 years ago.
- Numbers of new businesses, including mobile businesses, can increase in the short term during downturns. These conditions lead to increased numbers seeking self employment opportunities, either through having redundancy payments or more generally as a result of reduced employment opportunities, especially for older workers.
- Some of those accumulating capital during the mining boom may subsequently seek mobile business opportunities for lifestyle reasons when they have made enough money.

Business trends and market factors influence demand in various sectors

- For cleaning and facilities management, as with other services, there has been a global trend towards contracting out of support services for cost and management reasons as well to concentrate on core business activities.
- Relatively low barriers to entry have enabled rapid growth, although at the same time this is also a factor in possible over-supply and intense price competition. There is perceived to be saturation in some sectors e.g. dog washers, and so past growth levels cannot be assumed to continue in all cases.
- The growth of franchising has facilitated the spread and uptake of some types of service, especially where there is an innovative product and ongoing support (e.g. Eco-clean car detailing). Reduced risks may encourage some operators to buy franchises as an alternative to starting own businesses, but in general franchises tend to be not price-competitive unless they can offer other benefits to customers.

- The market trend towards bundling of building maintenance, cleaning and security services may affect the number of suppliers and favour larger firms in services to commercial customers.

Demographic and social factors

- Population growth is general driver as noted above
- Growing numbers of older people may influence demand for some domestic services e.g. gardening.
- Increasing numbers of working women and increased numbers of two-income household increase time pressures as well as disposable income and increase demand for domestic mobile services.
- Social, demographic and other changes have reduced demand for gardens in new housing (and will influence future demand for gardening services).

Technology

- Availability of cleaning machines and detergents facilitating modern cleaning methods and encouraging provision of services.
- Increased difficulty of DIY motor maintenance increasing demand for mobile services.
- New technologies may help to create new market demand which did not previously exist e.g. wheelie bin washing vehicles generating demand for bin cleaning services.

APPENDIX 7: SME NUMBERS AND GROWTH

Numbers

Estimated numbers are set out in Table A4 based on Yellow Pages estimates and discussions with BSCAA and MTA for cleaning and mobile mechanics. The numbers are uncertain.

Table A4: Estimated business numbers Perth Metro area 2006-7

Service	Total no
General commercial cleaning	250
Steam, pressure, chemical cleaning	100
Carpet cleaning	280
Mobile dog washers	80
Mobile mechanics	70
Lawn cutting and maintenance	500
Pest control	120
Swimming pool maintenance and repair	125
TOTAL	1525

- Some generalised figures are available on size of firm e.g. Ibisworld estimates 57% of cleaning firms have <5 employees while the average size of cleaning firm in WA is 30 employees, for pest control firms 7 employees and for gardening services 3 employees
- The nature of the activity influences the size of some firms e.g. mobile dog washes and domestic lawn mowing services are virtually all owner operators.
- Numbers include franchisees and are likely to be an underestimate of total numbers since some operators are casual or only advertise by mail drops or local newspapers.

Of the swimming pool maintenance firms listed in Yellow Pages only 8 specifically reference cleaning in their service name or service offering although many of the others may offer cleaning as part of the total service. Most pool cleaning is likely to be done by owners or through casual, non-advertised services and the maintenance services listed appear to be more technically skilled activities.

Past sector growth

The following figures illustrate growth in mobile services for Australia. Figures for WA are likely to be higher generally than these averages, reflecting higher growth than national.

Table A5: Growth in number of selected business establishments for Australia 2003-6

(Source IbisWorld based on ABS)

Service	2003-4	2004-5	2005-6	Notes
General cleaning services	7.1	4.8	4.5	97% by value is for commercial or government customers; 3% is for the domestic sector
Gardening services	3.5	2.3	1.5	55% by value is domestic and 45% commercial or government. Across Australia 25% is franchised
Pest control	2.0	2.0	1.1	Commercial and government work accounts for 60% while 40% is domestic. A high proportion of domestic business is pre-purchasing termite and other infestation work driven by

				the housing market
--	--	--	--	--------------------

Notes

Average employment growth in these sectors for Australia was 5% in 2003-4 and 2% for both 2004-5 and 2005-6.

Projected sector growth

Future growth in mobile industries is likely to mirror economic growth but subject to other factors (above) in specific sectors

- In the short term, growth of mobile businesses should reflect trends in recent years, although with steadier rather than the rapid growth seen when some types were relatively new.
- Some new types may appear and grow rapidly where they meet a particular need but none were identified which may immediately show spectacular growth.
- In the medium to longer term growth will depend on what happens globally and its impacts on the mining and building sector, and on the domestic economy generally.
- If there is a downturn in the economy there is likely to be a decline in general mobile business activity although, as noted above, there may be a short term increase in start-ups as mining and other employment opportunities decline
- Environmental factors may influence future growth generally and in specific sectors
 - Increased fuel prices have not impacted on services yet according to IbisWorld, but may have an impact in future.
 - The Lawn Mowers Association is concerned about the impacts of water restrictions and groundwater charging on lawns and demand for services
 - Water restrictions and risk of fines from polluting run-off may encourage non- water alternatives e.g. non-water based car cleaning.

APPENDIX 8: ENVIRONMENTAL ISSUES

Aspects and impacts – initial identification

Table A6 sets out the main environmental issues relating to mobile businesses.

Table A6: Aspects and impacts summary

Aspect Activity giving rise to an impact	Impact Environmental effect	Relevant businesses
1. Waste water Arising from cleaning or other activity	a) Potential risk to watercourses from detergents or other chemicals if waste water is released to storm drains. b) Potential contribution to ground or groundwater pollution if waste water is released to lawns or ground. c) Potentially unlicensed discharge to foul sewer	Detergents from: General cleaning Carpet cleaning (shampoos and dry cleaning chemicals) Car detailing (also oily runoff if engine cleaning) Dog washes (flea rinses and detergents) Pressure cleaning (also possible asbestos from roof cleaning)
2. Hazardous wastes Activities giving rise to potentially hazardous wastes e.g. oils, chemicals	Potential risk to watercourses or elsewhere if oil or other waste is not handled, stored and disposed of properly e.g. spilled or disposed of with general rubbish.	Mobile mechanics Facilities maintenance services
3. Use of hazardous substances Activities involving use of substances hazardous to health	Potential release harm to humans, animals and plants Potential risk to watercourses	Pest control (rodenticides and insecticides) Gardening services (herbicides) Cleaning services (e.g. solvents, disinfectants)
4. Solid wastes Activities giving rise to solid waste	Impacts of transport and landfill e.g. demand for waste, methane from putrescible waste, leachate from organic and inorganic materials.	Building and building maintenance waste Gardening waste Cleaning waste (consumables, containers, etc)
5. Water use	Depletion of a scarce resource	General cleaning Carpet cleaning Car detailing Dog washes Pressure cleaning
6. Materials use	Life cycle impacts of production, use and disposal.	Cleaning consumables Equipment supply and use
7. Energy use	Contribution to greenhouse and other emissions in power generation, depletion of fossil fuels	Transport energy. Electricity use in equipment use (e.g. cleaning machines) Petrol use in mowers Equipment maintenance for energy efficiency
8. Air emissions	a) release of air emissions e.g. ozone depleting substances	Air conditioning maintenance

General assessment of significance

Collectively the actual and potential impacts of mobile businesses are significant and worth addressing. However:

- Apart from pest control and air conditioning maintenance which are subject to operator licensing, none of the activities have been identified by the DEC as being of such concern as to require controls or licensing beyond general regulations (see below).
- The main pollution issue relates to potential discharges to stormwater and groundwater. However
 - volumes from domestic car cleaning/detailing services going to stormwater are likely to result in some run-off to storm drains but volumes are likely to be small compared to run-off from domestic self cleaning
 - Volumes from mobile activities, reflecting the relative scale of business, are likely to be small compared to the SME sector as a whole
 - most waste water from mobile businesses is generated from commercial/government cleaning services delivered on customer premises and subject to customer controls. For such services it may be the case that there are more likely to be customer controls as well cleaners following industry codes, as well as the risk of fines, which together reduce the likelihood of illegal discharges.
 - Total volumes of discharges from mobile dog washing are estimated to be relatively small and waste water mainly discharged to lawns where detergents may act as a wetting agent. Modern flea rinses are not believed to pose a significant risk although some older types are toxic to aquatic life.
- Mobile mechanical services can potentially give rise to risks of spills where they include oil and coolant change (as opposed to breakdown or electrical/mechanical services with minor impacts). However, coolant/oil loss has often already occurred before the mobile mechanic arrives. Where mechanics drain either, if following best practice, it will be stored for collection at the mechanic's own premises or at a third party workshop. There may be some improper disposal of waste oil and coolant. The extent is not known but there is no indication that it is a major issue.
- There are some solid waste issues but generally volumes are not large compared to other sectors
 - main source of solid waste is likely to be from building work, to the extent that this is classified as mobile business. Improving levels of building sector recycling and materials efficiency is important, but the issues are part of the broader issue of building industry sustainability and building is not a sector focus for this review
 - Wastes from home handyman services are likely to be similar to general building wastes but in smaller quantities. These are likely to be disposed of through the householder's domestic bin or taken away by the contractor
 - Garden wastes are not generally a concern (unless involving building waste) and tend to be left on site (eg. household lawn clippings) or taken away for green waste and mulching
- Water use may become a significant issue for the more water-intensive activities (as well as an opportunity for those with low or water-free technologies)
- Fuel use and fuel efficiency are likely to be an issue for all mobile businesses although they may save customers from traveling in many cases.

Significance assessment matrix

General criteria for assessing the significance of the above aspects and impacts are as follows follows

- H= high significance: Large volumes being used, generated released or potentially released; toxic materials being released; high potential risk of harm
- M = moderate: significant volumes being used, generated, released and some risk of harm
- L = low: small volumes being used, generated or potentially released; low risk of harm
- - = not applicable

Table A7: Significance assessment matrix

ACTIVITY	ASPECT/IMPACT							
	1. Waste water	2. Oily or other hazardous wastes	3. Use of hazardous substances	4. Solid waste	5. Water use	6. Materials use	7. Energy Use (inc transport)	8. Air emissions
General cleaning	M	-	L	L	M	L/M	M	L/M (solvents, indoor emissions)
Carpet cleaning	M	-	L	L	L/M	L	M	L/M
Pressure cleaning	L	-	L	-	L/M	L	M	-
Dog washes	L	-	L	L	L/M	L	L	-
Car detailing	L/M	-	L	L/M	L/M	L	L/M	-
Mobile mechanics	-	M		L/M	-	M	L/M	M (air conditioning)
Pest control	-	M/H (containers, surplus material)	M/H		-	M	M	M Airborne spray
Facilities maintenance	M (drain down)	M	L/M Cleaning agents		-	M	M	M (a/c, boilers)
Home services maintenance (heating, a/c)	-	-	-	L	-	L/M	M	M (a/c, boilers)
Handyman/building services	M/L	L	L	M	L/M	M	M	-
Garden services (inc weedkilling)	-	M (waste containers)	M Use of weed killers	M Branches, general waste	M	M Fertilisers, garden materials	M	-
Mowing	-	-	-	L (grass clippings)	-	-	L/M transport L mower fuel	Noise
Pool cleaning	L/M (backwash from filters)		L (pool chemicals)					

APPENDIX 9: ENVIRONMENTAL BEST PRACTICE

The following notes are based on NSW EPA Guidelines produced in 2002. The emphasis is on pollution prevention. Any such guideless in the current context might also include water conservation and energy efficiency. All stated measures are set out here although the likely use of some, such as bunds, is questionable

General introduction

- Don't risk a fine (reference to regulations and fines)
- **Never** allow wash water to flow into the gutter or stormwater drain.
- **Never** dispose of wash water to dry streambeds or where it can flow into wetlands or waterways.
- **Remember:** Only clean water should be allowed to run into gutters or stormwater drains, as they empty into our rivers and sea without any treatment. The drain is just
- The effort you take to ensure your business is operating to best environmental practice is a great selling point to customers and reduces the risk of a fine.

Carpet cleaners

- Wastewater and cleaning residues from carpet cleaning **must not** be disposed of down the stormwater drain.
- In sewered areas always empty wastewater down the sink or toilet, so that it goes into the sewer.
- In non-sewered areas wastewater should be stored in a collection tank until it can be disposed of correctly.
- Floors treated with pesticides should not be cleaned for at least 4 weeks.
- Ensure that your carpet cleaning machine uses a filter of not greater than 20 microns.
- Always rinse equipment and filters into a sink or onto grass, where water can soak in.
- Recycle detergent and chemical containers with the symbols below and return other containers to the supplier or manufacturer.
- Rinse out detergent containers into your cleaning machine to use the very last of the detergent.
- For top quality cleaning, always use the recommended type and quantity of detergent.

Car detailers

Before starting work

Determine how you are going to dispose of the wash water. Vehicles should be washed:

- On the ground where the wash water can soak in. (Be careful not to block the footpath.)
- On a wash mat where the wash water can be collected for disposal.
- On a driveway only if the water is able to drain to a garden or grassy area.

Best wash practice

- Use a wash mat and bunds to prevent wash water running into the gutter and stormwater drain.
- Always use the smallest possible amount of soap, detergent and polish.
- Use a trigger hose to reduce the amount of water required.
- Dispose of vacuum cleaner waste in the garbage bin.
- Recycle empty detergent containers.
- Place a protective cover on the ground before spraying the car with polish.

Cleaning oily surfaces and engines

- Wastewater containing oil must be passed through an oil separator before disposal.
- Portable separators are available or wastewater can be stored in a tank and then emptied into a separator at your garage base.
- We **do not** recommend cleaning engines as a mobile operation, due to the difficulties in handling large quantities of oil-contaminated

Biodegradable detergents

- Use biodegradable alternatives wherever they are available.
- Although biodegradable products are less damaging to the environment, run-off containing these products must not be allowed to enter stormwater drains. (Biodegradable detergents have been designed to be easily broken down by the microorganisms in the sewage treatment process.)

Natural products

- Natural products are **not** always harmless. Many ‘natural’ products are highly toxic.
- Follow the same guidelines for natural products as for other chemicals.

Essential items to keep wash water out of the drain

- **Wash mats:** Wash mats are **essential** for washing vehicles in areas where there is a risk of wash water flowing into the gutter or stormwater drain. These are light, portable, easy to use mats that are rolled out onto the ground and the vehicle is parked on top. The mats have pop-up sides to hold the water, and a small pump so wastewater can be directed to a suitable disposal location or storage tank.
- **Bunds:** Portable bunds that do not allow water to pass through, can be used to direct water away from stormwater drains. They can also be used to surround the vehicle to contain wastewater. These bunds are tubes of geotextile filled with impermeable material. Sand filled bunds allow water to filter through and are not suitable for trapping the dissolved pollutants in carwash water.
- **Spill clean-up kit:** No matter how careful you are, accidents do happen – so be prepared and carry a spill response kit. This can be as simple as sand or kitty litter to soak up spilled chemicals and detergent, a brush and dustpan to sweep up, and a bag to package the material for safe disposal.

Dog washers

Make your business fish friendly

Our stormwater system empties directly into our rivers and ocean without any treatment. Products used in dog washing, such as flea rinses and shampoo, can kill fish and aquatic life. **Never** allow anything to flow into the gutter or a stormwater drain.

Wash water disposal

Always plan your wastewater disposal options before you start work.

- **All** wash water must be passed through a basket before disposal to remove pet hair.
- Pet hair should then be collected up and disposed to a garbage bin.
- If you are working in an area where there is no suitable wastewater disposal option, the water should be stored for later disposal.
- Consider installing wastewater storage tanks under your trailer to enable you to store wastewater for later disposal.
- Always use the smallest amount of shampoo possible.

If bath water contains	Dispose to		
	Sewer	Septic tank	Ground where water can soak in
Shampoo only	✓	✓	✓
Selected shampoo and flea rinse	✓	X	X

Medicated shampoo	✓	X	X
-------------------	---	---	---

Directing wastewater away from drains

Portable bunds can be used to direct wastewater away from stormwater drains.

Biodegradable products

Biodegradable products are designed to breakdown in the sewage treatment process. They should never be allowed to run into the stormwater drain

Flea treatments

- Flea rinse containing diazinon, chlorpyrifos or any anticholinesterase compound should **never** be used. These do not break down in the sewage treatment process and kill aquatic organisms. Half a teaspoon of these compounds can kill everything in an area the size of an Olympic swimming pool.
- Promote the use of modern flea rinse alternatives to your clients.
- Not using flea rinses is healthier for you, the dogs you wash and the environment.
- Dogs that have been treated for pests in the past two days should not be washed.

Natural flea products

- Any product that kills fleas is a pesticide, even if it is 'natural'. All flea products should be used with care, as they will kill soil fauna (worms, invertebrates etc) if disposed onto the ground, and misuse can cause health problems for you and the dog.

Mobile mechanics

You *MUST* be Licensed

- You must be registered with the Motor Vehicle Repair Industry Council (MVRIC), and hold the appropriate licence for the motor vehicle repair activities that you wish to carry out. In addition to the equipment list from the MVRIC, every mobile mechanic should carry the following list of Essentials to help meet the requirements of environmental legislation and to minimise the risk of a pollution fine.

Air conditioning maintenance

- Vehicle air conditioning maintenance and replacement can only be carried out by operators authorised by the MVRIC.

Essentials

To minimise the risk of pollution you should carry:

- **A spill kit for emergencies:** This should contain absorbent material (e.g. sand or Kitty Litter) to soak up spilt oil and other liquids. Spent absorbent material should then be placed in a bag and disposed of correctly (e.g. to landfill, or placed in a garbage bin). The kit also needs to contain bunds, plus absorbent pillows and sausages to soak up and divert spills.
- **Wastewater storage container** Water used to clean greasy hands and equipment should be collected and disposed into a waste oil separator unit.
- **Waste liquid collection containers:** All waste liquids including brake fluids, radiator coolants etc. should be collected in separate containers and disposed of at a licensed trade waste collection centre.

- **Oil filter collection container:** Filters must be drained and disposed of via a filter recycler. Never put oil filters in a domestic garbage bin.
- **Waste tracking system:** The disposal of some wastes and waste liquids **must** be tracked, including oil, transmission fluid, batteries, oil and fuel filters and cleaning solvents. This means you must be able to provide evidence of proper disposal.
- **Impervious ground sheet:** An impervious ground sheet should be placed under the vehicle to protect the ground against accidental spillage. An added bonus is that it gives you a clean surface to work on.
- **Drip trays:** Drip trays should always be used when working on the radiator, brakes and oil systems.
- **A properly equipped garage base:** Every mobile mechanic should have a properly equipped garage base where you degrease engines, wastewater, oil filters and other parts.
- **Keep your van tidy:** Keeping your mobile unit clean and tidy will reduce the risk of a spill or accident. Ensure all liquids are stowed securely. Used parts such as oil filters should be stored in containers.

Environmental Extras

To minimise the risk of pollution and give your business a greener, cleaner image you should also carry:

- A bunded work mat: This is placed under the vehicle being serviced in case of an accidental spill and to catch any minor drips and spills. Pop-up edges contain any spills.
- Spill-proof oil tray: Even if you drop or knock the tray the oil cannot be spilled.
- Spill-proof fluid container: These are designed so that even when they are knocked liquid cannot be spilled.

Jobs to avoid...

Some jobs have a high environmental risk and are best carried out in a garage including:

- engine reconditioning involving the removal of the engine and transmission
- extensive work to the differential and other major running gear items
- degreasing, cleaning or steaming an engine or engine bay.

Jobs that you should never do...

- Spray painting: Spot touch-ups using a brush are acceptable, but spray painting activities should be carried out in an approved spray painting booth. Vehicles should never be spray painted in the open air. Undertaking this activity other than in an approved spray painting booth may result in a fine.