Ministry for the Environment
Manatū Mō Te Taiao

Guidance Principles:
Best Practice for Recycling and Waste Management Contracts

Working Draft

New Zealand Government

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Disclaimer

Preface

The Ministry for the Environment has produced this best practice guidance document to assist local government when procuring contracts for waste management and recycling.

The guidelines were prepared between October 2005 and May 2006 and were based on the information available at the time. Since then the policy guiding waste management and minimisation has gone through – and continues to go through – a period of increased focus and development. The Ministry for the Environment is currently in the process of developing waste policy that will have a direct impact on the way waste management and minimisation are carried out in New Zealand.

As a result of these changes, an internal Ministry review of the document was carried out in April 2007 to ensure the information in the document was still accurate. To reflect some of the changes that had occurred since the document was compiled, the Ministry made a number of amendments in May 2007.

The Ministry for the Environment is now releasing this document as a working draft, and we will discuss the document with councils to identify how it can be improved. The Ministry has prioritised a work programme to update guidance to local government on preparing waste management plans, and this update will be done concurrently. Changes resulting from the current phase of waste policy development will also be incorporated, where necessary.

Further development in the following sections is planned:

- recycling methods and material quality
- evaluation criteria
- weighting objectives
- national policy and strategy
- collection of waste and recycling data
- key performance indicators (KPI)
- contract templates
- contract term and flexibility
- encouraging innovation.

We welcome your feedback on this document, which can be sent to:

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Executive Summary

These *Guidance Principles* provide practical advice and tools to use when procuring waste management and recycling services. The emphasis is on local government contracts because of the major role councils play in waste management in New Zealand, but businesses and industry may find some of the principles useful when procuring their waste and recycling services.

The principles look at achieving best practice by providing:

- advice on incorporating council and community waste minimisation objectives into contracts
- information on preparing the most suitable contract for your situation
- assistance in understanding the trade-offs that may have to be allowed for in a contract
- guidance for the development of the principal–contractor relationship
- tools for managing contracts effectively.

This document has been structured to follow the chronological order for developing a waste management or recycling contract. Following the introduction and overview in section 1, section 2 looks at planning. Before a contract is developed, careful planning is essential to identify the objectives and desired outcomes of the services. Settling on the appropriate plan is also critical so elected members and company management can make informed decisions that will see contracts deliver the desired outcomes.

An essential area of contract development is the scope of services, particularly as a number of significant factors are driving change in the way the scope of services should be specified in a contract. These factors include:

- higher levels of service expected by the community
- higher-profile health and safety standards
- trends towards user pays
- increased choice of receptacle (single stream vs. mixed collection)
- the quality of recyclable material collected
- stabilisation of the volume of recyclable material, creating a need to encourage further yield
- an increasing range of recyclable products available for collection
- licensing of contractors
- an increasing demand for materials by onshore processors
- waste management plans, the New Zealand Waste Strategy and national policy on product stewardship.

Considerations and options for collection systems are outlined in detail in section 3 to help you decide on the best system for your situation. Recommendations are also provided on the length of contract term, and we look at the advantages and disadvantages of longer-term and shorter-term contracts, and at core elements of service specification and key performance indicators. Section 4 covers health and safety, education and communication, and licensing. Tender evaluation procedures are covered in section 5, and an example of a tender evaluation plan is given in Appendix 2.

Section 6 provides recommendations on the form a contract should take, and the *Guidance Principles* conclude with advice on ongoing contract management, focusing on reporting, audits and performance review.

The flowcharts in Appendix 2 outline common decision processes that can be followed, although we recognise that each procurement situation is unique and that there is no single best solution. There are a number of reference boxes throughout the document so you can pursue further research into topics of interest.

1 Introduction

1.1 Purpose and scope

The purpose of the *Guidance Principles* is to highlight key issues with contracts, the procurement process and ongoing contract management in the areas of waste management and recycling. They provide practical advice and tools to use when procuring waste management and recycling services. They are intended as a guide only, and contain information to help users to identify options and issues encountered during the procurement process.

The *Guidance Principles* cover developing, establishing and administering contracts for the waste management and recycling industry. They have been specifically developed as an overview that will assist in planning, preparing and managing waste and recycling service contracts.

Best practice contracts for the procurement of recycling and waste management services are a key aspect of waste management planning and a driver for waste minimisation. The *Guidance Principles* look at achieving best practice by providing:

- advice on incorporating waste minimisation objectives into contracts
- information on preparing the most suitable contract for your situation
- assistance in understanding the trade-offs that may have to be allowed for in a contract
- guidance for the development of the principal–contractor relationship
- tools for the effective management of contracts.

The document has been structured to follow the chronological order for developing a waste management or recycling contract.

1.2 Audience

We expect this guide will be used mainly by councils, although businesses may also find some aspects useful. The intended audience includes local government elected members and council officers, business managers, waste industry organisations, community waste groups and service providers. However, the emphasis is on local government contracts because of the major role of councils in waste management and recycling in New Zealand. The aim is for this guide to help organisations align and improve their practices within the New Zealand framework for waste management, as established by strategic planning documents and legislation.

1.3 Background

The production of these *Guidance Principles* is a significant step towards best practice waste management planning and implementation. In August 2004 the Ministry for the Environment commissioned Montgomery Watson Harza (MWH) New Zealand Ltd to review the existing situation in New Zealand. This review looked at the issues and opportunities in the contracting of council waste management and recycling services. Subsequently, a number of workshops have been held with stakeholders to identify contracting issues and build a set of principles to foster improvement in waste management and recycling services procurement.

These *Guidance Principles* are intended to summarise the key issues already highlighted, as well as looking to international resources and identifying any other issues critical to achieving best practice. Note that the issues discussed here arose from workshops held by the Ministry for the Environment with invited members of industry, and from national and international research of procurement processes. Wider consultation has not yet been undertaken.

We recognise that a large number of issues arise in the preparation of contract documents for the waste management industry. Each procurement situation is unique, and there is no one solution for rural and urban or national and local scenarios. As a result, it has only been possible to cover key issues identified by stakeholders.

The Ministry for the Environment contracted Morrison Low & Associates to prepare these guidelines. They are based on generally accepted practices and standards at the time of their preparation. No other warranty, expressed or implied, is made as to the professional advice provided. The sources of information used by Morrison Low & Associates are outlined, but no independent verification of this information has been made. These guidelines were prepared between October 2005 and May 2006 and are based on information available at the time of preparation. An internal Ministry review was undertaken in April 2007, and a number of amendments were made in May 2007.

The Ministry for the Environment's role is to advise the Government on New Zealand's environmental laws, policies, standards and guidelines. It also monitors how laws and policies are working in practice and takes action where it is identified that improvement is needed. As part of these responsibilities, the Ministry provides guidance on waste management planning to local government, the waste management industry and major waste producers.

1.4 What is best practice?

Achieving best practice in recycling and waste management should be at the core of the procurement process. Sustainability Victoria[1] defines best practice as the current 'state of the art' process or service that aims to produce outcomes consistent with the community's social, economic and environmental expectations. 'State of the art' services will not always be able to be provided in the New Zealand context, but contracts should always aim to produce outcomes that meet or exceed the expectations of the community.

[1] Formerly EcoRecycle Victoria. See www.sustainability.vic.gov.au

Best practice is a product of the effective purchase of waste management services, so what is best practice will vary from council to council. Achieving best practice requires a certain level of understanding of what is being purchased and how likely it is to provide the desired outcomes. Continuous improvement is an inherent part of best practice.

'Smart buyer' is a term used to describe the set of skills and experience necessary to successfully purchase services. To be a smart buyer it is necessary to:

- identify and define the desired outcomes
- show transparency and accountability in spending public or company money
- ensure fair treatment of all parties
- give consideration to maintaining a competitive market
- ensure flexibility to allow for changes in waste minimisation.

1.5 National legislation, policy, strategy and direction

Strategic documents, policy and legislation combine to form the framework for waste management. Since the information this document was based on was collated, the Government has increased its focus on waste minimisation and management. The Ministry for the Environment is currently looking at all aspects of the management framework in New Zealand to ensure an integrated approach to waste management and minimisation. This work is likely to significantly alter the current approach, and these changes will need to be reflected in this document once the outcomes are known.

The Government has announced that it intends to secure funding for further solid waste minimisation initiatives. It is proposed that part of this funding will be used to improve national infrastructure, because the Government would like to see more reprocessing of materials occurring onshore. The Government also supports product stewardship schemes, especially for products that cause particular environmental harm or pose disposal problems. Established voluntary schemes have achieved good results, but there are concerns about 'freeloading' by business that do not contribute. The Government intends to provide greater support to these existing schemes and to work with industries on schemes that can improve product management.

To keep up to date with the latest waste work, please go to the Ministry's website (http://www.mfe.govt.nz/issues/waste/).

Currently all of the following are relevant for both government and companies that are contracted to councils to provide recycling and waste management services.

- The *New Zealand Waste Strategy* – this presents a vision for minimising waste and optimising waste management. It sets out a practical programme of action, as well as specific targets for waste reduction and management. http://www.mfe.govt.nz/publications/waste/waste-strategy-mar02/index.html
- *Waste policy* – the Government is increasing its focus on reducing and managing waste. It sees the need for a legislative backstop to support product stewardship schemes and funding for waste minimisation initiatives to increase the scope and effectiveness of local and national waste minimisation initiatives. The Government will also develop, in partnership with local government, a recycling programme for public spaces.

- *Product stewardship policy* – product stewardship is a 'cradle to grave' tool that helps reduce the environmental impact of manufactured products. Under product stewardship schemes, producers, brand owners, importers, retailers, consumers and other parties accept responsibility for the environmental effects of their products – from the time they are produced until they are disposed of. There are currently a number of industry-led voluntary product stewardship schemes operating including:
  - the *Packaging Accord 2004*, which is a voluntary product stewardship agreement bringing together key players from throughout the packaging life-cycle, including the packaged goods industry, recyclers, local government and central government (see http://www.mfe.govt.nz/issues/sustainable-industry/initiatives/packaging/index.html)
  - the *Used Oil Recovery Programme*, which is a voluntary programme where the major oil companies operate nationwide collection networks and supply used oil to Holcim, New Zealand's Westport cement kilns, where it is burnt at high temperatures
  - *Tyre Track*, a voluntary tyre collection system that links tyre dealers, transporters and registered end points (generally recyclers and landfills).
- The *Health Act 1956* – this provides councils with statutory obligations for the collection and disposal of refuse.
- The *Local Government Acts 1974 and 2002 (LGA)* – these require councils to assess the collection, reduction, reuse, recycling, recovery, treatment and disposal of waste in their district. Councils fulfil this requirement by completing a waste management plan and contracting for waste management services.
- *Waste management plan (WMP)* – under the LGA 1974, a WMP is any plan for the management of waste in the district. Every WMP must make provision for the collection, reduction, reuse, recycling, recovery, treatment and disposal of waste in the district and for the effective and efficient implementation of the plan.
- *Long term council community plan* – the LGA 2002 requires councils to have a long term council community plan (LTCCP). The purpose of the LTCCP is to describe the activities and community outcomes of the council, and to provide integrated decision-making and co-ordination of resources and a long term focus for decisions and activities.
- *Bylaws* – under the LGA 1974 a council may make bylaws for regulating waste management in its district. Bylaws provide the necessary regulatory support to achieve WMP targets and the broader objectives of the New Zealand Waste Strategy.
- *Licensing* – local authority bylaws may contain provisions for licensing waste collectors and the operators of waste management facilities. This enables councils to monitor and regulate waste collectors and operators.

1.6 Waste minimisation

Councils have an obligation under the waste management framework to promote waste minimisation strategies, which are outlined in their WMPs. The focus is firmly on diverting as much material from landfill as possible, with an emphasis on promoting greater individual and business responsibility for waste at all stages of its life-cycle. There are a number of ways in which waste reduction and recycling can be encouraged, including:

- user-pays refuse collection
- providing accessible, convenient recycling services
- providing smaller refuse receptacles

- bylaws that ban recyclable material, including green waste, being placed in landfill
- education and community-based social marketing programmes that promote recycling.

Increased recycling is important for successful waste minimisation. For recycling to succeed, however, socioeconomic factors such as economic growth, population growth, available infrastructure and the value, size and distance of recycling markets must be considered in a waste minimisation strategy. Another consideration is the quality of material demanded by recycling markets. It should also be noted that banning or restricting material from entering the residual waste stream may cause an increase in the level of illegal dumping unless alternative affordable recycling, recovery or reuse options are available.

In 2002 New Zealand became the first country in the world to adopt a vision of zero waste, Towards Zero Waste. The concept of zero waste is a key component of the vision of the New Zealand Waste Strategy. Since 2002, when the Waste Strategy was released, 70% of councils within New Zealand have adopted zero waste policies.

Criteria for councils adopting zero waste policies, developed by the Zero Waste New Zealand Trust, include:

- a council resolution confirming its commitment to a target of zero waste to landfill
- commitment to full and open community consultation and ownership of a zero waste strategy, involving community, council and business sector partnerships.

More information on the Zero Waste New Zealand Trust can be found at: http://www.zerowaste.co.nz/.

1.7 Relationship between purchaser and provider

Historically, contracts have followed the traditional approach whereby the purchaser (or *principal*) defines the scope and specifies the services, and the provider (or *contractor*) supplies those services. These types of contracts worked well for defined packages of work. Refuse collection contracts are an example, where the contractor collected bins from the street and the principal looked after aspects such as ratepayer communication and advertising.

More recently, the roles of principal and contractor have blurred. The contractor now often undertakes additional responsibilities beyond the core provision of the service, and the approach to contracts has moved towards partnering and alliances between the contracting parties.

See: Case Study A: Timaru District Council and Enviro Waste Services Ltd (partnering)

Partnering is about aligning all parties to common project objectives, and providing a relationship-based mechanism for problem solving. An alliance involves a contract agreement that embodies common objectives, shared risk and reward, and a structure based on mutual respect and working together. This involves a single service delivery team with representatives from all parties, sometimes working together in the same office. The most obvious benefit from this approach is the drive for high performance that is generated in an environment of co-operation and respect. Alliances can involve extra expense to establish and maintain, however, so they are more feasible for larger projects where the scope of services may be difficult to define precisely.

Contractors can be multinational companies, large and small local companies, or – as is often the case with recycling – community group-based initiatives. The type of contractor will bring different benefits and risks to the contract, so it is important to manage this from the outset with the most effective contractual arrangement for the particular situation. Factors to consider are:

- business and management expertise
- a reputation for quality service delivery
- value for money
- the ability to deal with the risks
- the ability of an organisation to engage with the community on waste reduction issues
- the level of community involvement and buy-in for waste reduction that is required.

For more information

Appendix 1: Case Study A: Timaru District Council and Enviro Waste Services Ltd

Appendix 1: Case Study B: Ashburton District Council and Wastebusters Trust Canterbury

Colquhoun C, Snow, 1995. *Recyclanomics.* This paper describes how in the Far North, experience with community group contracts shows that the operational aspects of recycling are competitive with the operational costs of waste disposal: http://www.zerowaste.co.nz/assets/Reports/Recyclanomics.pdf

1.8 Selected glossary

For the purposes of these *Guidance Principles* the following definitions and acronyms have been adopted.

EOI	expression of interest
Household organic waste	this can include kitchen waste and green waste
LTCCP	long term council community plan
MGB	mobile garbage bin
Mobilisation period	the time between award of contract and commencement of services when the contractor is procuring plant and equipment and familiarising themselves with aspects of the service
MOU	memorandum of understanding
MRB	mobile recycling bin
MRF	materials recovery facility
Recycling	the reprocessing of waste materials to produce new products
RFI	request for information
RFP	request for proposal
RFT	request for tender
RTS	refuse transfer station
Waste	solid waste material that is unwanted and/or unvalued, and discarded or discharged by its owner
Waste minimisation	all activities aimed at preventing, reducing, reusing or recycling waste
WMP	waste management plan or waste minimisation plan.

2 Planning

Before developing a contract, you need to plan carefully to identify the objectives and desired outcomes of the services. Settling on the appropriate plan is also critical to enable elected members and company management to make informed decisions that will ensure contracts deliver the desired outcomes.

2.1 Key service objectives to consider

The following are key points for councils to consider when establishing their service objectives. Councils should ensure:

- the expectations of the community and the outcomes of the waste management plan are met
- the overall objectives are clearly defined (eg, diversion from landfill, providing local employment opportunities, supplying materials to reprocess in the local area or within New Zealand, meeting national goals)
- the evaluation criteria meet community expectations (including community group support and access to parts of the contract) and the overall community and council objectives
- the funding for services is clearly determined (rates, user pays or both)
- services focus on priority waste streams (local and national priorities)
- flexibility of services is maintained to accommodate the introduction of additional products to the waste stream (eg, degradable plastics)
- flexibility of services is maintained to allow the collection of additional materials as markets grow (eg, organics)
- the collection method to be used is identified (noting the impacts this may have on other objectives relating to quality of material)
- minimum standards for the quality of the recovered materials are specified so they are acceptable for the identified reprocessing market (eg, local, national, overseas)
- the party to be responsible for education/promotion of new services is clearly identified (eg, new materials to be collected)
- the length of contract is specified, while maintaining flexibility to implement new technology and services
- ownership of recovered materials is considered, particularly if changes in legislation/ policy may have an impact (eg, product stewardship)
- contract components are separated or structured in a way that allows for greater financial transparency
- health and safety issues are adequately addressed
- the ability of the contractor to deliver the proposed services is assessed
- competition within the industry is maintained
- statutory and legal obligations are met (eg, the Waste Strategy, legislation, government policy)
- there is equity of services to ratepayers across the area.

2.2 Confirming service objectives

In the initial planning stage, council managers and elected members must reach agreement on the objectives of the services and the contractual approach. Developing the objectives serves to link the council's waste minimisation targets with the performance criteria of the contractor. It is important that the waste minimisation targets are agreed by the council *and* the community and fit with national targets, before service objectives are developed. These performance criteria need to be realistic and achievable, and should be clearly stated in the contract. It also helps to align the council's service objectives with national waste management objectives such as the Packaging Accord and the New Zealand Waste Strategy.

See: Case Study C: Manukau City Council (option assessment report)

Developing service objectives may involve commissioning an assessment report on options for service provision. This assessment report can include socioeconomic and legislative factors and the waste management strategic direction of the council, as well as key operational issues that have an impact on the services.

Life-cycle assessment can be used to assess the environmental performance of various systems. Examples of this methodology include the Sustainability Assessment Model (SAM),[2] *Independent Economic Assessment of Kerbside Recycling in Australia*[3] and *WISARD*, a life-cycle analysis tool focused on waste management and adapted for New Zealand conditions.

The Sustainability Assessment Model follows a four-step, full-cost-accounting approach, as follows.

1. Focus the model on a discrete project.
2. Track the project's sustainable development impacts over its full life-cycle.
3. Identify and measure the impact of the project under four headings: economic, resource use, environmental and social impacts.
4. Cost the externalities identified from the development of the project (damage cost estimates are assigned to externalities).

Another example of a planning tool is the Zerowaste Action Planning (ZAP) system, which consists of methods that councils can use to successfully influence and engage all sectors of the community in the process of waste minimisation. This includes providing the leadership, resources, incentives and information that will enable the community to participate fully and drive change (see: http://www.smf.govt.nz/results/4186_zap_report.pdf).

It is desirable to hold early discussions with prospective tenderers for the services, to enhance both their understanding of the objectives of the service and the related risks, and also the council's understanding of the reality of implementing operational requirements. This process often reduces the need for a number of notices to the tenderer during the tender process.

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[2] Bebbington et al (2001), Moving from SD reporting to evaluation: the sustainability assessment model, New Zealand Business Council for Sustainable Development. http://www.nzbcsd.org.nz/_attachments/Sustainability_assessment_model.doc

[3] Nolan-ITU Pty Ltd and SKM Economics (2001), Independent Assessment of Kerbside Recycling in Australia – Revised Final Report – Volume 1, for The National Packaging Covenant Council.

2.3 Waste stream ownership

Legal opinion varies on who owns the waste stream. Ownership can vary at different stages of the collection, sorting, processing and disposal processes. One opinion is that the waste is owned by the person placing it for collection until it is collected by the collector it is intended for, when ownership then passes to that person, and so on down the stream. The ownership of the waste stream is based on the rules of the service, and these rules are often outlined in council bylaws and/or the contract document.

There are a number of scenarios where the ownership of waste comes into consideration, including where waste is:

- on private property
- on public property before collection
- 'stolen' by other parties from public and sometimes private property (eg, recyclables, inorganic waste scavenged)
- disposed to landfill
- in joint ownership due to a risk or revenue sharing arrangement (eg, recyclable product).

To ensure there is clarity of ownership of the waste stream, it should be clearly spelt out in the contract document where ownership lies and when.

2.4 Elected member or company management endorsement

See: Case Study C: Manukau City Council (elected members' endorsement)

It is essential that political (for councils) or management (for companies) mandate be obtained before procuring services. Elected members or company management must understand the benefits, disadvantages and possible outcomes of a service option if they are to make an informed decision. To obtain the best possible contract result, they must also have full understanding of the objectives, type of procurement method proposed, and the trade-offs that may be necessary.

Examples of trade-offs that require consideration include:

- the recycling product market risk, and sharing this risk with the contractor
- ownership of the waste stream – it is desirable for councils to have ownership at some point of the cycle so they have 'control' of the decision-making process
- the cost of recycling materials versus landfill disposal
- the term of the contract, and the effect of new technology that may become available during the term of the contract
- the cost of different service options.

Note that the evaluation of trade-offs should take into account local knowledge and the specialist expertise of advisors.

It must be recognised that councils have to meet short-term statutory targets while also developing and delivering longer-term, sustainable waste management policies. It can be difficult for relatively short-term political administrations to make long-term and potentially unpopular decisions, such as changing traditional weekly collection methods to alternate weekly collection of recycling and residual waste.

2.5 Choosing the right procurement process

There are a number of options for procurement processes. The appropriate process depends on the state of the market and on how certain the principal is about the particular service they want provided. Principles of sound procurement to consider include:

- obtaining the best value for money by selecting appropriate trade-offs involving outcomes, quality, price and administrative expense
- conducting a process that is transparent (as far as possible) and fair to all parties
- making the expectations of the principal clear, in both the tender and delivery stages, so that tenderers can plan accordingly
- being consistent in drawing up tender documents and in evaluation processes, so participants can have confidence in the process
- ensuring new entrants have a realistic chance of winning at least some projects to grow their skills and experience.

See: Case Study D: Fonterra: (best value; request for proposal)

See: Case Study E: Palmerston North City Council (community desire; request for proposal)

The expression of interest (EOI), request for proposal (RFP) and request for tender (RFT) are all forms of procurement process available. They all have different attributes that make them appropriate for certain situations. For instance, an EOI is used to shortlist prospective tenderers and is useful to allow the market to indicate to the principal the benefits and disadvantages of particular service options. However, the EOI process can be unproductive for both the principal and tenderers, because tenderers are often unwilling to compromise their commercial intellectual property by divulging it in an EOI.

Another form of procurement is the renewal of an existing contract for a further term, either with or without a variation to the scope of services being negotiated.

Early discussions held with prospective tenderers for services are desirable to help the tenderers understand the objectives of the service and the related risks. It also helps the council to understand the reality of implementing operational requirements. This often streamlines the tender process by reducing the need to amend tender documents.

Councils should always review any procurement of services in relation to their policy for delegating authority. This is because the particular value of the services can determine the appropriate tender process to be followed and who has the authority to undertake that process.

There are a number of documents available which outline best practice procurement processes for waste management and recycling and provide helpful advice with the planning and production of tender documents (see below).

For more information

Australia

Resource NSW, Model Waste and Recycling Collection Contract and User Guide (2005). The model contract is a comprehensive tendering package, developed in consultation with councils, collection contractors and industry to help streamline the tendering process: http://www.environment.nsw.gov.au/education/SPD_LGOV_WasteContract.htm

EcoRecycle Victoria, Guide to Model Contracts Kerbside Recycling, Collection and Acceptance Sorting Contracts, April 2001. Sustainability Victoria is reviewing its draft contract documents for its Recyclables Collection Service Contract: http://www.sustainability.vic.gov.au/resources/documents/061023_Combined_531765_8.DOC and their Recyclables Acceptance and Sorting Contract: http://www.sustainability.vic.gov.au/resources/documents/061023_Accept_and_Sort_531762_7.DOC

EcoRecycle Victoria, Guide to Preferred Service Standards for Kerbside Recycling in Victoria, August 2004: http://www.sustainability.vic.gov.au/resources/documents/PSS_final_doc_sept.pdf

United Kingdom

DEFRA (Department for Environment, Food and Rural Affairs), Waste PFI Procurement Pack (2000). This is a work in progress, providing a guide to the procurement of waste management services under a private finance initiative, a public private partnership or a conventionally funded project: http://www.defra.gov.uk/environment/waste/localauth/funding/pfi/procurement.htm

WRAP (Waste and Resources Action Programme) is a major United Kingdom government programme established to promote sustainable waste management by tackling barriers to waste minimisation and increased recycling: http://www.wrap.org.uk/

Note: Contract models are developed for both rural and urban situations as well as their country of origin. Take care to ensure the model chosen is applicable to the local situation.

3 Scope of Services

This section looks at the issues to consider when developing the scope of services for a waste management or recycling contract. This is an essential area of contract development, particularly because a number of significant trends are driving a change in the way the scope of services should be specified in a contract. These trends include:

- higher levels of service expected by the community
- higher-profile health and safety standards
- trends towards user pays
- increased choice of receptacle (single stream vs mixed collection)
- quality of recyclable material collected
- stabilisation of the volume of recyclable material, creating a need to encourage further yield
- increasing the range of recyclable products available for collection
- licensing of contractors
- increasing demand for materials by onshore processors
- waste management plans, the New Zealand Waste Strategy and national policy on product stewardship.

Sections 3.1 to 3.3 identify the key issues relating to the development of the scope of services for a contract. Section 3.1 covers generic services for both waste management and recycling contracts, whereas section 3.2 is specific to recycling services and 3.3 to residual waste services. Some sub-sections provide information covering generic, recycling and waste management service situations.

3.1 Generic services

3.1.1 Service objectives

The service objectives decided on in the planning stage (see section 2.1) need to be stated up front in the contract document, with clear links drawn to the service being provided.

3.1.2 Collection system considerations and options

The collection system is largely driven by the choice of receptacle and the term of the contract. In choosing the type of receptacle for refuse or recycling services, there are a number of factors to consider, including:

- community expectations
- willingness of communities to pay for services
- method of collection in relation to health and safety issues
- cost – the tender process may be used to price several receptacle options if there is also uncertainty as to the type of receptacle

- colour – the receptacle or lid colour can be important for users in distinguishing between recycling or refuse receptacles
- supply and storage
- ownership – councils need to retain sufficient control to ensure they are able to make decisions
- recycling targets to be met
- the contamination rate of recyclables and the effect of this on the value of material to recycling markets, particularly onshore processors
- damage to the recyclable product being collected and the resulting effect on its value
- the appropriate size of refuse receptacle, to minimise the use of recycling receptacles for refuse
- the ability to impose a user-pays system on refuse receptacles
- the effective life of collection equipment
- flexibility to increase the scope of the service.

You will particularly need to consider the quality of materials used for the refuse and recycling receptacles. The Ministry for the Environment is encouraging councils to ensure that the quality of material is sufficiently high to meet industry requirements. New Zealand re-processors require material to be of a certain quality, and the Ministry is encouraging onshore reprocessing of materials where possible. Although there is debate on the different collection methods available, the Ministry is not promoting one over another. The quality of material is the key outcome, and it is up to the collection industry to come up with new and innovative ways of safely collecting materials while maintaining high quality.

Tables 1 and 2 outline collection system options for receptacle types, frequency of collection, method and cost.

Table 1: Residual waste collection system options

	Mobile garbage bin (MGB)	Refuse bag	Front-loading bin	Other (eg, trash can)
Receptacle characteristics	• MGB sizes 240L, 120L and 80L are most common. • Smaller MGBs encourage waste minimisation. • Large MGBs discourage waste reduction. • Alternative diversion options are necessary when small MGBs are used. • Ensure the use of existing MGBs is clearly spelt out. • The MGB asset requires a database to record numbers, location, maintenance details, etc.	• 60L bags are most common. • Variety of materials – usually purpose-manufactured for refuse collection. • Bags are easy to distribute. • Bag size can be reduced as recovery rates rise.	• Useful for multi-tenanted buildings with storage space restrictions. • Unlikely to be available as a rural option.	• Fitted lid – weather and animal proof.

	Mobile garbage bin (MGB)	Refuse bag	Front-loading bin	Other (eg, trash can)
Frequency of collection	• Weekly or fortnightly, depending on size and other services offered by the principal.	• Weekly.	• Weekly or as required.	• Weekly.
Method of collection	• Appropriate advertising and education are required. • Health and safety issues are reduced by mechanical lifting of the MGB. Operators do need to dismount vehicles to realign the MGB, which may have health and safety implications. • Monitoring of the content of the MGB for potentially hazardous, commercial refuse or green waste can be undertaken with collection vehicle-mounted equipment.	• Manual, using 'runners', with associated health and safety issues (eg, traffic hazards). • Health and safety issues occur from cuts from sharp objects, strain and sprain injuries. • Overweight bags can be an issue. • Monitoring of the content of refuse bags is limited to cursory inspection by 'runners', and it is often difficult to identify prohibited materials in closed bags. • There is flexibility of collection method as specialised collection equipment is not required. • Animal strike occurs.	• Mechanical lifting. • Access for specialised lifting equipment is required. • Monitoring of the content of bins for potentially hazardous, commercial refuse or green waste can be undertaken with collection vehicle-mounted equipment.	• Manual, using 'runners', with associated health and safety issues. • Can be mechanically lifted depending on receptacle shape/size. • Monitoring of the content of receptacles is limited to a cursory inspection by 'runners' as they are loaded into the vehicle, usually when it is too late to prevent collection of prohibited materials.

	Mobile garbage bin (MGB)	Refuse bag	Front-loading bin	Other (eg, trash can)
Cost	• There can be significant capital costs depending on the term of the contract and amortisation period of the asset. Most MGBs have an effective life of 15 years. • Options for the contractor or principal to own the MGB. • MGB costs include capital outlay for purchase, servicing of debt if they are purchased under a 'hire purchase' arrangement, administration of bin distribution and database management, and recycling of bins at the end of their useful life. Collection and disposal costs are additional. • Contractor ownership option, paid for up front or over the term of the contract as a component of the collection rate (with or without a residual amount at the end of the contract). Ownership is retained by the contractor. Maintenance of bins and replacements for stolen bins are the contractor's responsibility. The MGB is usually transferred to the principal's ownership at the end of the contract term. • This option may preclude smaller operators due to the capital requirement. • There is a principal ownership option – paid for by the principal, who carries the risk. • Additional costs relate to maintaining and administering an MGB database.	• Well suited to user-pays collections. • Low cost to consumer compared to MGB. • Bag costs include receptacle purchase, collection and disposal costs. • User pays can have the effect in small communities of companies promoting their large MGB service and thus discouraging waste reduction. User-pays collections also often encourage MGB collectors to offer private collection services in high-density (profitable) areas, leaving the low-density and rural (less profitable) areas to the council collection service.	• It is usual practice to charge for supply of the bin by the collection company.	• Purchased by the resident and reusable.

Table 2: Recycling collection system options

	Mobile recycling bin (MRB)	Crate	Plastic bag	Plastic bag supplied by household
Receptacle characteristics	• MRB 240L, 120L and 140L are most common. • Containerised systems for all recyclables (includes paper collection) produce the highest yield. • MRBs are not always suitable for rural collections (ease of handling issue). • Some residents (eg, disabled or elderly) have difficulty handling large crates.	• 45L, 60L and 70L are the generally accepted sizes. • One crate may not be large enough for recyclables from large households. • Some residents (eg, disabled or elderly) have difficulty handling large crates.	• 60L. • Suitable for rural collections.	• Supermarket bag.
Frequency of collection	• Can be longer periods between servicing (eg, fortnightly). If so, it can be economically efficient by reducing the number of vehicle movements.	• Weekly.	• Weekly or fortnightly.	• Weekly.
Method of collection	• Mechanical lifting of MRB reduces safety risks. • Contamination can be between 15 and 20%, but depends on the receptacle used for residual waste (eg, a split MGB/MRB for residual waste and recycling may have as high as 38% contamination). • MRB yields are higher than crate systems but contamination is also higher. • Monitoring the content of the MGB for potentially hazardous, commercial refuse or green waste can be undertaken with collection vehicle-mounted equipment.	• Spread of recyclable material by wind, animal and vandal attack are common issues. Lids are available. • Sorting of recyclables frequently occurs at kerbside, which increases the quality of materials arriving at the processor and also educates residents in what is not recyclable, as non-collectable materials can be left at kerbside for disposal by the resident. • Low contamination at 2 to 8%. • Safety issues exist with some manual collection methods (eg, repetitive lifting and hazards working on the road).	• There are sorting issues. • Contamination is high due to the ability to 'hide' non-complying waste in the bag. • Health and safety issues occur in relation to possible inclusion of sharp or other dangerous materials in the bag that are not obvious to the collector.	• There are sorting issues. • Contamination is high due to the ability to 'hide' non-complying waste in the bag.

	Mobile recycling bin (MRB)	Crate	Plastic bag	Plastic bag supplied by household
Cost	• Significant capital costs depending on the amortisation period. Most MRBs have an effective life of 15 years. • Options for contractor or principal to own MRB. • Contractor ownership option: paid for up front or over the term of the contract as a component of the collection rate (with or without a residual amount at the end of the contract). Ownership is retained by contractor. Maintenance of bins and replacements for stolen bins are the contractor's responsibility. Usually transferred to principal's ownership at the end of the contract term. • This option may preclude smaller operators due to capital requirement. • Principal ownership option – paid for by principal, who carries risk. • There are additional costs relating to maintaining and administering an MRB database. • There are reductions in service costs related to MRB usage related to a higher recycling yield and reduced landfill disposal costs.	• Low cost compared to MRB. • More likely that principal has ownership of crates due to 'portability' of crates by residents. Contractor is usually responsible for the initial supply and delivery of crates, with payment by principal on delivery to properties. • Stock for replacement and additional crates is held by contractor at their cost – payment on delivery to properties.	• Low cost compared to crate and MRB. Not reusable. • Suitable for user pays.	• No capital requirements.

3.1.3 Organic waste considerations

For a significant number of councils, approximately 50% of the waste stream is organic material (green waste and food waste). Australian research shows that waste volume reduces significantly where a regular green waste service is provided. Public or private enterprise provision of a green waste service is dependent on a council's waste management policy for their area. It is common practice in Australia to provide a public collection service, whereas in New Zealand local authority drop-off services and private enterprise collection are the more common service options for green waste.

Options for Kerbside Collection of Household Organic Wastes[4] outlines the following issues that need to be considered when selecting kerbside organic waste collection systems:

- the household organic waste diversion targets to be met
- type of waste to be collected
- whether bags or bins will be used, and which size is appropriate
- the capacity and type of waste treatment facilities available
- any operational constraints (eg, health and safety considerations, multi-tenanted dwellings)
- markets for the compost produced
- frequency of collection (eg, climate consideration)
- ability to monitor the system (eg, through household surveys, waste audits)
- householder co-operation
- convenience
- whether the scheme will be voluntary or compulsory.

The report lists options for collecting green waste and/or food waste as:

- collecting food waste only
- collecting green waste only
- collecting both food and green waste, but in separate containers
- collecting combined food waste and green waste.

The combined option system increases the yield of organic material collected and only one collection receptacle is required. It is also more user friendly to collect both waste streams together, saving time for the user and potentially helping reduce odour and leachate from the food waste. However, possible drawbacks of this option are:

- the potential economic impact on private green waste collectors through loss of revenue
- less control of the material mix at the treatment plant compared to separate waste streams
- the ratio of food waste to green waste may vary substantially between seasons, affecting the material mix at the treatment plant
- a secondary system for food waste collection may be required from properties where there is no green waste generation (eg, apartments).

The Ministry report discusses the frequency of collection, including the advantages and disadvantages of weekly, fortnightly and seasonal collections. Case studies show that weekly collection is preferred, often with a fortnightly collection of recyclables and residual waste. The main reason for weekly collection is to avoid unacceptable odours.

Kerbside collection methods can be either mechanical or manual. Mechanical collection decreases health and safety risks but reduces the ability to manage contamination, while manual collection provides the ability to manage contamination at kerbside but with increased health and safety risks. Table 1 in *Options for Kerbside Collection of Household Organic Wastes* lists the issues and options to consider when assessing kerbside organic waste collection.

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[4] Ministry for the Environment 2005. *Options for Kerbside Collection of Household Organic Wastes.* Ministry for the Environment: Wellington.

3.1.4 Transportation options

The transportation options available depend on the distance to disposal sites. Where distances are significant, refuse transfer stations and baling sites can be used to consolidate loads for transportation to disposal sites. Some councils tender transportation services separately because of the specialist plant and equipment required to transport waste long distances and to take advantage of competitive rates.

3.1.5 Service provision options

The management of the waste stream in its entirety must be considered in the scope of services. Three service provision scenarios – separation, bundling and sharing – are outlined below.

Separation

The separation of services (eg, separating refuse collection from recycling collection) provides the benefits of transparency of price for the different service components, maintains competition between providers, and supports waste reduction (see section 3.2).

Bundling

The bundling of services involves combining several services under the one contract. Where there are few providers able to provide the total service, sub-contractor relationships can be developed by the head contractor to provide the different components of the service. In some situations where providers are available, it may be beneficial for the contract to have separable service components so smaller providers, such as community groups, can tender for a portion of the work and be awarded a separate contract for that portion. Bundling of services can provide price advantages, but this may be at the expense of obtaining definitive source data for each waste stream.

For more information

Examples of bundled contracts can be found in: Ministry for the Environment 2004. *Review of Waste Management Contracts*. Ministry for the Environment: Wellington.

Sharing

The sharing of services between more than one council depends on a number of issues, including the:

- alignment of objectives
- similarity of services desired
- common disposal location
- geographic location of the population base (important for ensuring economy of scale)
- use of recyclables.

Price savings (typically 5–10%) can be realised through the bundling or sharing of services. If councils want to share services it is imperative that there is a political mandate from all councils involved. This can be formalised through a memorandum of understanding between councils.

The key drivers behind shared services are:

- providing improved services to the community in each locality
- obtaining gains in service cost efficiencies.

When employed correctly, the general benefits of shared services include:

- improvement in the level of services
- consistency of services, making any future regional initiatives easier to implement
- cost reduction due to economies of scale, which will accrue to both the councils and the contractor. Some cost efficiencies for the contractor through servicing a larger area will be passed on to the councils through a lower contract price (eg, rationalisation of facilities, plant, staff, reporting and data collection systems). The council will also be able to make efficiencies through rationalising staffing and resources.

It is important to identify and mitigate risks. In examining the feasibility of a shared services contract, the process is to weigh up the benefits against the remaining risks to make an informed decision on whether a shared services contract or an alternative option is desirable. The following risks arise in shared services contracts. Some of these apply to all contracts, although the risks may increase with a shared services contract and be difficult to mitigate:

- political/community resistance to shared contracts, resulting in implementation issues
- customer perception – the community may perceive a loss of ownership of their services if they are being undertaken from a base outside the council area or managed by another council
- inconsistency of council requirements, which reduces the likelihood of efficiencies and cost savings
- changes and uncertainties during the contract term, which will increase the likelihood that costs will increase and the possibility of contractual problems
- incorrect information in a contract, which increases the risk of a variation being sought with resulting additional cost (this risk will affect both councils even if one supplies accurate information)
- contract administration and management – lack of clear definition of the respective councils' staff roles and responsibilities can cause problems
- contractual issues – with a shared service contract one council is exposed to any problems and issues that affect any other council
- effect on local contractors – by increasing the size of the contract some local tenderers may not be able to tender, and there is an increased likelihood that a larger contractor will be awarded the contract
- tender evaluation – for a shared services contract the tender evaluation process will be more complex as a result of having to satisfy the needs of all the councils.

There are a number of tender mechanisms that can be used for shared services.

- *Joint tender / contingent pricing* – separate contracts are developed for each council, each including aligned services and contract provisions to provide economies of scale and consistency for the councils. The tenderer can price either or all contracts. If they tender for all, then they can offer a 'combined contract' price. If sufficient benefits accrue to the councils, then this tender would be accepted. Each contract is administered separately by each council.
- *Single framework contract* – a contract is entered into by one of the councils on behalf of the others, with the others being nominated parties to receive services under the contract. This option does not easily accommodate differences in specification / levels of service, short-term commitment between the councils or political alignment. The council/s who has/have delegated the role of principal to the other would have to seek any legal redress under the contract through the principal, who may not necessarily agree with the contract breach. The tenderer may offer a discount for providing services to all the councils.
- *Joint principals contract* – a contract is awarded by the councils as joint principals. The resulting contract is managed by a management board, who make the major operative and contractual decisions.
- *Joint venture legal entity* – a legal entity is formed (probably a council-controlled organisation) with shareholding by the councils. One contract can be entered into for the services they wish to tender and administer together.

3.1.6 Seeking alternative service provision

Innovation in service delivery from contractors is desirable and should be encouraged in the procurement process. You can encourage innovation that leads to diverting waste from landfill or improvements in the quality of materials by providing incentives in the contract for developing solutions that result in a reduction in residual waste stream sent to landfill.

The scope of services needs to be flexible enough to allow for innovative practice. It is also important that the procurement process allows for tenderers to demonstrate how they intend to provide innovative practices. It may be beneficial to outline the scope of services broadly at the beginning of the procurement process and then provide for negotiations between the principal and contractor to finalise an innovative service solution. You will need to carefully consider the assessment criteria used to evaluate the potential a tenderer has for innovation.

It would be a good idea to include a continual improvement clause in a contract that provides for regular reviews (eg, annually) with the contractor to discuss and agree inclusion of emerging and new more 'sustainable' products and services to ensure integration of the latest standards throughout the term of the contract.

3.1.7 Competition

There will often be a range of service providers offering competing services in the same area, particularly for collection. This has had a pronounced effect since the introduction of user-pays refuse collection, which has created new markets for domestic refuse collection and competition from private enterprise collectors. This, in turn, has affected the type of refuse collection contract issued by councils.

Councils with user-pays collections now sometimes find themselves in direct competition with private operators who can offer a cheaper and more convenient service, focusing on collection from urban areas where collection is more economic. In some urban areas rationalisation is starting to take place, with competitors contracting with each other to uplift refuse and recycling while still competing for the same customer.

Councils should make sure they do not provide a competitive advantage to a contractor by permitting them to collect waste as part of council services while simultaneously offering a private service. However, to promote recycling yields, the contractor should be encouraged to collect recyclables for the council service simultaneously with commercial collections. This different approach means contracts should specify that recycling and waste management collections only occur in separate collection vehicles. This separation of services will help keep the performance of the contract transparent.

3.1.8 Costs

Rates funded or user pays?

Payment for refuse or recycling services can either be through rates funding or user-pays systems.

A user-pays service encourages waste minimisation as long as the price of the service is set at a level that encourages use of recycling services over refuse collection systems. You will need to consider the community implications of user pays, including:

- the nature of the council's rural/urban aspect
- social equity and the householder's perspective
- management issues (such as an increase in illegal dumping) involved in transferring from a rates-funded system.

The effect of user pays on the competitive market must also be considered (see 3.1.7). Private service providers tend to collect from areas where the most profit can be made, whereas council services are provided throughout the authority's area and are therefore not as competitive. It is also possible to provide flexible service options to users, including different-sized receptacles and varied collection frequency to suit household needs.

A rates-funded system is by way of an annual uniform charge or general rates. This system can either allow limited or unlimited refuse bags, or provide a certain size of mobile garbage bin (MGB). A service where unlimited bags are provided discourages waste minimisation, whereas those services that allow limited receptacles (either number, capacity or collection frequency) can encourage a degree of waste minimisation.

There are also partial user-pays systems that include a combination of rates and user-pays funding (eg, a set number of bags supplied by council, with any additional bags purchased by the resident).

If a council owns a landfill, there will be a revenue decrease as a result of waste minimisation initiatives, which must be considered when deciding on the appropriate funding system for contracts.

Waste stream ownership

Approaches to ownership of the waste stream are variable and may be influenced by the objectives, but it is recommended that ownership be divided as follows.

- Residual waste from the refuse collection service is owned by the principal until it is disposed at landfill.
- Recyclables during the collection process are owned by the principal if they are to be delivered to a sorting contractor.
- Recyclables become the property of the sorting contractor when they are delivered by the collector to the sorting facility.

Contract payments

Refuse

Payment for refuse collection is dependent on the receptacle used. For user-pays or resident-provided refuse bags where there is an unlimited number of bags, payment should be priced on a per tonne collected basis. Refuse from MGBs, or where there is a limit to the number of bags that are to be collected, can be priced on a per household basis. Pricing on a household basis requires an appropriate database of households and means that household numbers must be ongoingly tracked. This involves more administration than payment on a per tonne basis.

Recycling

Recycling collectors prefer a per household/property payment basis. The need for a performance-based component to the collection contract is not considered necessary when the volume and quantities of receptacle are known. The sorting contractor should be paid on a tonnage basis, because this is how product is paid for by the market after processing.

There are a number of other cost considerations when developing a price schedule, including:

- cost of receptacle provision
- buy-back prices for recyclable materials
- additional services such as promotional material production and delivery.

Sensitivity analysis for recycling

It is recommended that sensitivity analysis be completed by the principal before tender evaluation. Sensitivity analysis determines likely costs, using upper and lower limits of recycling yields, product mix, and the council's philosophy on risk exposure.

Funding for infrastructure

Capital expenditure required for waste management and recycling services can be significant. Capital costs can include:

- construction of refuse transfer stations and resource recovery centres
- initial receptacle provision (crates, MGB, MRB)
- weighbridges
- collection vehicles
- sorting plant.

There may also be additional set-up and operational costs associated with shared services contracts.

The ability of small contractors (such as community groups and small companies) and large companies to source capital to develop infrastructure varies greatly. This is a factor to consider when incorporating capital expenditure as a contractor requirement in a service contract.

Bonds

Contractors are usually required to maintain a bond to guarantee their performance of the services. Bonds are calculated either in accordance with a council's agreed schedule of bond amounts that relate to the value of the contract, or against the perceived risk of the service being disrupted. They are typically 1–2% of the annual contract value, or, as a minimum, a sufficient amount to continue the service for a limited period until the service is re-established following failure of the contractor. An ongoing check needs to be made by the contract manager to ensure that the bond remains live during the term of the contract.

Bonds are not a significant cost to a larger contractor, but they can be for community groups and small companies. Smaller organisations may find it difficult to obtain a cash bond from a lending institution. Council ownership of facilities and high capital expenditure equipment can reduce the amount of the bond and its cost to the contractor. Consideration could also be given to joint ventures.

3.1.9 Risk

Allocating risk between the principal and the contractor is a crucial aspect of forming a waste management or recycling contract. Traditional contract models often saw parties expending time and energy protecting their own position and attempting to ensure the other party bore the consequence of any risk. The trend now is to use the contract to allocate risk to the party who is in the best position to manage that particular risk. Partnering and alliance relationships are useful as a basis to share risk among the parties involved (see section 1.7).

Although risks can be reasonably well defined in waste management and recycling contracts, they are always an issue, particularly in relation to:

- refuse – tonnage reducing where waste minimisation measures are implemented
- recycling – increasing tonnage and fluctuations in the markets for recyclable materials.

These can be provided for in contracts, with provision made for renegotiation in the event of significant reduction in waste tonnage or changes in the recyclable commodity market.

Contract risks also include such things as traffic management, emergencies or natural disasters. Contingency plans can be written outlining management of these risks. These can be regularly reviewed and reported as contract deliverables.

3.1.10 Supporting information

It is important that tender documents contain reliable supporting information on current systems to help the tenderer define the scope of the services for their tender submission. Unreliable information may result in disputes arising at a later date. If the tenderer is uncertain about the information or how reliable it is, the cost of the resulting risk to the tenderer may be incorporated in their tender submission. Information normally supplied includes:

- property numbers to be serviced
- historical tonnage figures (including a breakdown into categories)
- product to be collected
- anticipated percentage of contamination
- location maps
- site plans
- examples of communication materials and promotional programmes
- receptacle specification.

3.2 Recycling

International best practice for procuring recycling services encourages the separation of collection from the acceptance/sorting of recyclable material. There is a growing trend for this kind of separation, and this is likely to become more prevalent in the future.

For more information

Ecorecycle Victoria. This link has further detailed information about the key contract features of split collection and sorting contracts:
http://www.ecorecycle.sustainability.vic.gov.au/resources/documents/BPKRP_Guide_to_Model_Contracts_(2001).pdf

Separating these services makes pricing more transparent and allows for performance components in both contracts. It is also recommended that, where possible, the acceptance/sorting contract is tendered before or at the same time as the collection contract. This means the acceptance/sorting contractor can have input into setting the parameters for the quantity and type of collected materials to be delivered to the sorting facility. Award of both contracts can be made at the same time, when the full implications and commitments are known for both services.

The most common recycling contract system currently used in New Zealand is to have one contract for the collection, acceptance, sorting, marketing and sale of recyclable material. The reasons for this are:

- the size of the operation does not always justify separation, because there are no real benefits to the council
- there is less administrative cost to a council in managing one contract
- the revenue from the sale of the recyclable materials is used to offset the cost of the collection.

3.2.1 Recycling risk

The risk relating to recyclable commodity prices is a matter for debate between councils and service providers. Best practice in Victoria, Australia, is to advise councils to adopt a no-risk option, requiring the contractor to take all risk in relation to commodity price fluctuations to avoid exposure to cost variations over the life of the contract. Alternatively, risks can be shared between the contractor and the principal. For recycling, there should be separation of the known costs (ie, collection and processing costs). Any risk sharing should be targeted at the variable component of recyclables, which are the markets and sale prices.

One risk-sharing mechanism to deal with this is to apply a market realisation index to the recyclable components. An index identifies the individual sale prices at the time of tender, with an agreed margin for the contractor. This can then be monitored and adjusted throughout the contract to ensure that neither party carries all the risk of fluctuations in the market.

3.2.2 Product stewardship support

Establishing an equitable division of the cost to recycle each type of recyclable material is necessary to ensure product stewardship support provided for by the Packaging Accord 2004. This includes keeping the costs of collection and sorting of each material separate and transparent. This can be done via a recycling index (as identified in section 3.2.1), where separate prices are provided by tenderers for recycling each type of material. Issues to consider in determining recycling costs are commonly based on:

- collection vehicles and their maintenance
- receptacles
- operation, including administration, supervision and staff
- sorting facility
- contamination losses.

While the above concept appears attractive, there are a number of issues to consider, including:

- tenderers are reluctant to divulge full costing, because they don't want to share the benefits with the principal when the market is high for a product
- there may be confusion about the real value of recyclable materials
- tenderers may price items to meet their needs and not to reflect the reality of market conditions

- there is a need to ensure any index does not provide a disincentive to obtaining the best price possible for recyclables
- the index could be calculated by an independent person (index figures can be subjective because they are dependent on the market, quantity and the terms of the contract).

Further analysis is required to better define this process, but this is outside the scope of these guidelines.

3.3 Processing/sorting options

The most common recyclables collected in New Zealand are bottles, jars, plastics, steel cans, aluminium cans, aerosols, paper and cardboard, and plastics. The Government has a desire, expressed in the Packaging Accord 2004, to grow recycling markets and increase the range of materials collected and recycled. This may be accomplished in the future by way of a 'recyclability index', which would specify that 'any material identified as recyclable by the recyclability index' should be collected. This index may be used in conjunction with recycling contracts. It is essential that contracts contain clauses that do not preclude the addition of new materials for collection.

The yield of material is also directly related to the collection receptacle used. There are losses of material for recycling associated with contamination in receptacles and breakage during the collection process. Contamination can be the result of:

- source material being non-recyclable
- collection methods not being suitable for the material collected.

Losses due to contamination are significantly higher in co-mingled mobile recycling bin (MRB) systems compared with crates. This is partly due to the kerbside sorting that occurs from crates and also the visibility of the contents of crates. Contamination rates are commonly in the region of 2–8% for crates and between 15 and 20% (this includes contamination as well as process loss) for co-mingled MRBs. The net yields from co-mingled MRB systems are higher than for other systems, and contamination rates may be lowered with the introduction of systems such as cameras on vehicles, MRB electronic identification systems and computer-generated letter follow-up.

The over-compaction of co-mingled recyclables decreases their value. Where there are separate collection and processing contracts, provision is often made in the contract for a maximum compaction rate. The compaction rate is defined as the weight of the load divided by the volume of the vehicle. Sustainability Victoria state in their *Guide to Preferred Service Standards for Kerbside Recycling in Victoria* that, as a general rule, collection should not result in compaction rates above 140kg per cubic metre.[5] The collection contractor is then responsible for paying the acceptance/sorting contractor for the processing of any over-compacted loads.

[5] See: http://www.sustainability.vic.gov.au/resources/documents/PSS_final_doc_sept.pdf

3.3.1 Markets for recyclable materials

Markets for recyclable materials are vulnerable to change, and prices for recyclables may vary greatly during the term of a contract, particularly for paper, plastics and glass. Sharing of these risks between the principal and contractor is discussed in section 3.2.1. A reduction in the value of a material may make it uneconomic to collect, process and transport it to market, especially where the market is some distance away.

When specifying recyclable material for collection, you should also consider the availability of suitable markets. The contract should make provision for the collection of additional materials as viable options become available during the contract term.

For more information

The Australian Council of Recyclers has produced a number of recycling guides for a range of materials, which include kerbside specifications for the recovery of these materials: http://www.acor.org.au

3.4 Residual waste

3.4.1 Landfill disposal options for residual waste

There are two landfill disposal options available to councils: they can own and use their own landfill (either exclusively or with other council or private partners), or contract for the use of another council or private landfill. A decreasing number of councils now own a landfill.

When writing contracts for disposal in circumstances where the council owns a landfill, you should consider:

- security of profit from the landfill
- possible conflict of interest with the council's waste minimisation plan waste reduction objectives
- community affordability
- the number of refuse transfer stations required, including their location, ownership, operation and value
- diversion payments
- the remaining life of the landfill.

Where a council's disposal option is a commercially owned and operated landfill (in which a council has no financial interest), a council should be aware of the following when developing and awarding a contract.

- the cost of disposal is dependent on the relationship between landfill owners and collection/transportation companies
- transportation costs may be high because there are increasingly fewer local and more regional disposal facilities, which are often not located in the council area.

A point that must be noted is that refuse collection contracts that include disposal of the collected refuse provide a competitive advantage to landfill owners and discourage waste reduction.

For more information

Ministry for the Environment 2004. *Review of Waste Management Contracts*. Ministry for the Environment: Wellington.

4 Additional Considerations

4.1 Health and safety

4.1.1 Collection method health and safety issues

New Zealand does not have industry-specific health and safety guidelines covering the kerbside collection of domestic waste or recycling. Nevertheless, it is strongly recommended that during the preparation of tender documents and evaluation of tenders, emphasis be given to health and safety. This includes providing for health and safety measures in the proposed management of services, collection methodology and plant configuration.

For more information

Guidance for developing health and safety measures in the industry can be found in the Accident Compensation Corporation (ACC) and Occupational Safety and Health (OSH) 2001 publication, *Code of Practice for Manual Handling*:
http://www.osh.govt.nz/order/catalogue/pdf/manualcode.pdf

The Code is considered to be current best practice, and introduces assessment tools for identifying, evaluating and controlling manual handling hazards to reduce risk of injury through manual handling tasks.

WasteMINZ has developed safety guidelines for operating rear-loading compaction collection vehicles to improve employee safety, and intends to continue researching health and safety issues through its Industry Safety Group. There are a number of hazards for runners undertaking manual collection, including sharps, biological contaminants, strains and sprains, and vehicle-related accidents.

For more information

WasteMINZ, Operation of Rear Loading Compaction Trucks Safety Requirements: New Zealand Guidelines for Waste and Recoverable Resource Collection, Processing and Disposal, 2002:
http://www.wasteminz.org.nz/conference/conferencepapers2005/Greg%20Dearsly.pdf

Dearsly G, *Research Paper: The Cost of Manual Handling Injuries in the NZ Waste Industry*. Paper presented at the WasteMINZ Conference, October 2005.

Another relevant code of practice is the *Transit New Zealand Code of Practice for Temporary Traffic Management*. This code contains specific requirements that apply to the use of mobile operations, including vehicle signage and safety clothing specifications. The definition of mobile operation has rubbish collection specifically listed:
http://www.transit.govt.nz/technical/copttm.jsp

In Australia, mechanical collection using mobile recycling bins and mobile garbage bags is coming to be seen as best practice for the collection of domestic waste and recycling to eliminate manual handling and reduce associated risks to employees. When deciding on the best collection method it is important to consider the effect it may have on the quality of the collected material and the flow-on effect of this on the value of the material to markets. EcoRecycle Victoria's *Guide to Preferred Standards for Kerbside Recycling in Victoria* includes OSH risk assessment for manual kerbside collection and identifies the main hazards involved. Further detail from other publications can be obtained by accessing the following reference sites.

For more information

EcoRecycle Victoria, *Guide to Preferred Standards for Kerbside Recycling in Victoria*, 2004. http://www.sustainability.vic.gov.au/resources/documents/PSS_final_doc_sept.pdf

Worksafe Victoria, *Non-Hazardous Waste and Recyclable Materials: Occupational Health and Safety Guidelines for the Collection, Transport and Unloading of Non-Hazardous Waste and Recyclable Materials*, 2003.

WorkCover NSW, *Code of Practice for the Collection of Domestic Waste*, 2004.

In New Zealand's smaller rural districts the collection of domestic waste and recycling is often done through refuse transfer stations. Health and safety issues at these facilities vary from those associated with kerbside collection systems and need to take account of:

- the provision of facilities for employees at these sites
- the responsibilities to members of the public using the facilities.

For more information

The *Guidelines for the Provision of Facilities and General Safety and Health in Commercial and Industrial Premises* (1995) gives assistance on what is required at refuse transfer stations: http://www.osh. govt.nz

Sections 15 and 16 of the Health and Safety in Employment Act 1992 set out the legal obligations of councils, contractors and their employees to members of the public. Councils and contractors need to put in place an OSH plan to meet these obligations and a robust system that audits compliance. The audit system should be agreed before contract begins and monitored to ensure it is taking place.

4.1.2 Risk assessment tool

AS/NZS 4360:2004 Risk Management and *The Guidelines to AS-NZS 4360 (2004)*, which is a companion guide to 4360 containing explanatory information and examples, outline risk assessment that may be used for waste management services and contracts.

While the standard and companion guide provide generic guidance for the effective management of all forms of risk, more detailed guidance may be required in specific areas. Of relevance to the waste management industry is a handbook based on AS/NZS 4360: *Environmental Risk Management: Principles and Processes* (SAA HB 203).

For more information

http://www.risksociety.org.nz; http://www.standards.co.nz

4.2 Education and communication

Residents need to be kept informed of recycling practice before and during the term of recycling contracts. The aim is to maximise the yield and minimise the contamination of recyclables. Contracts usually provide for the production and distribution of documents about waste minimisation, litter issues and the benefits of recycling. Information on an increase in collected materials (eg, a move to collect all plastic types) and the impacts of new materials in the market (eg, degradable plastics) should also be communicated to users of the service.

The provision of educational facilities, such as viewing areas designed for schools and other groups to observe processing at material recovery, is an effective education tool.

For more information

The following link has examples of good practice documentation for recycling education and communication: http://www.packaging.org.nz

4.2.1 Responsibility for delivery

Responsibility for the delivery of education programmes is best undertaken by councils, although these functions may be contracted by the council to specialist education and promotional providers. Bear in mind that education is not the core business of collection contractors, and as such is often not delivered as effectively as by other organisations. However, the contractor can assist with the production and distribution of informational leaflets, stickers and notification of services.

Conversely, community groups argue that they have the networks, contacts and low-cost structures for achieving maximum community involvement from council education and promotion. There is also a further argument that councils' regulatory role is a limit on their effectiveness in the area of education and promotion.

4.2.2 Financial provision

Financial provision for promotion and education can be made in the contract price schedule as a provisional sum to be expended on the instruction of the council. The contractor may not necessarily be called upon to provide these services. This will ensure that there is funding available for education and promotion for the duration of the contract, and that this is not 'removed' during the council's annual budgeting process.

The allocation of sufficient funding for education and promotion programmes is essential if waste reduction targets are to be achieved.

4.2.3 Content

Often advertising, education and promotion of recycling services reaches beyond its target area. This can confuse the residents of adjacent areas that have different recycling procedures. Simplicity, consistency and predictability are expected by residents and visitors to an area for them to support recycling services. Education and promotion should follow the principle of providing clear information that explains simple, essential and convenient tasks. It should also be sustained and aimed at achieving community involvement and buy-in.

4.3 Licensing

Councils may use bylaws to regulate collectors and facility operators through licensing to ensure contractor quality standards and street amenity are maintained, and waste stream information is provided.

5 Evaluation

5.1 Pre-tender meeting

Pre-tender meetings are useful to help define the scope of services, to provide clarification and to disseminate information. It is vital to communicate the overarching objectives and scope of services to prospective tenderers (see section 2.1). Often pre-tender meetings are perceived to have limited benefit, because prospective tenderers are reluctant to share proprietary information that may be used at a later date by the principal in a request for tender.

However, if the purpose is to distribute information, they do have the benefit of ensuring all tenderers are fully informed of the desired outcomes being sought by the principal, and only one meeting is necessary to convey the information.

5.1.1 Evaluation plan

An evaluation plan is essential to ensure the appropriate factors are considered when comparing potential service providers. It also provides documented evidence of the evaluation procedure followed in the event of any legal challenge to the outcome. It is important to run a fair and transparent evaluation process. All decisions and discussions with tenderers should be documented throughout the process, especially for high-value or long term contracts.

The plan should contain details of the:

- tender evaluation team
- tender timetable
- tender opening procedure
- evaluation procedure, including evaluation criteria and weighting given to price and non-price attributes (note that it is important that the evaluation criteria fit with the council's waste management plan and desired outcome)
- process for evaluating conforming, non-conforming and alternative tenders
- negotiation process with preferred tenderers
- tender recommendation, and reporting to council
- award of the contract.

An example of an evaluation plan is given in Appendix 2.

Land Transport New Zealand's *Competitive Pricing Procedures* is widely used as an evaluation tool. Care should be taken with their strict application for waste management contracts and to ensure the principal retains the flexibility to allocate weighting to each attribute, to ensure they reflect the overall intention being sought (see 'Key attributes' below). For example, the principal may want to direct recovered materials to a local supplier and would therefore weight this attribute accordingly.

For more information

http://www.ltsa.govt.nz/funding/manuals.html#cpp1

Meetings with short-listed tenderers are a good idea to clarify aspects of the tender and to meet key personnel. Organisations should maintain flexibility to negotiate with short-listed tenderers where contracts are long term, have high public exposure, and ongoing contract management is a critical component.

For more information

Although not a waste industry document, Transit New Zealand's *Tender Evaluation Training Programme* (August 2003) offers some relevant advice for tender evaluation: http://www.transit.govt.nz/content_files/rca/RcaNewsItem3_Attachment.pdf

NZS 3910:2003 *Conditions of Contract for Building and Civil Engineering Construction* provides a standard form of general conditions of contract for incorporation into construction contract documents. Take care when using this document because it is intended for use with construction contracts: http://www.standards.co.nz/web-shop/?action=viewSearchProduct&mod=catalog&pid=3910:2003(NZS)

5.1.2 Key attributes

The following are the key non-price attributes each tenderer should submit information on.

a) *Relevant experience* – details of relevant experience, showing the tenderer's suitability for the work described in the specification. Where sub-contractors are to be engaged, their relevant experience should also be supplied.

b) *Track record* – evidence of the tenderer's ability to complete projects to target performance levels. Evidence should demonstrate the ability to complete projects on schedule and within budget, and past conformity with safety requirements. The names, position and telephone numbers of past clients who may be contacted as referees should be included. Similar information is to be provided for any proposed sub-contractor.

c) *Technical skills* – details of key personnel who will be engaged on the contract works, including their relevant skills, experience and availability.

d) *Resources* – details of plant, equipment, machinery and other facilities intended to be used on the contract works, and whether such plant, equipment, machinery or other facilities are owned or will be hired.

e) *Management skills* – details of management methods, skills and systems applied to carry out the contract works. These skills are to include management training given to staff, and methods of communication between staff and the engineer. Systems for maintaining records relating to the contract works, systems for reporting internally and as required for this contract, and systems used in the preparation and submission of payment claims should also be described. The company's safety record (ACC claim record and OSH record) and the procedures used to ensure safety at the contract works must be submitted in terms of the Health and Safety in Employment Act 1992 by fully completing the contractor's Health and Safety Pre-Qualification Questionnaire.

f) *Methodology* – a detailed description of the methodology proposed to achieve the specified end result within the required time, including but not limited to:
   - public safety
   - public relations
   - methods to minimise environmental damage
   - reinstatement methods
   - communication
   - programming
   - quality assurance procedures
   - implementation and supervision.

It is increasingly common to include an attribute for innovation (eg, any measures to reduce the economic impact on the council in providing the services, ways of minimising service provision risk or including provisions for new services) and/or waste minimisation practice. Another method of showing innovation during the tender process is through the submission of a non-conforming or alternative tender. To identify any benefits from an innovative tender, a comparison should be made with a conforming tender.

It is acceptable to make health and safety a separate attribute, and make it pass or fail.

5.1.3 Weighting attributes

A key aspect of evaluating tenders is the weighting of attributes. When weighting attributes, however, those involved in the process will often have different views. One method of weighting attributes is to compare attributes against one another. This process is called cross-impact analysis, and allows the attributes to be compared to one another and an appropriate weighting assigned. When considering the weightings it is important to keep in mind the council and community objectives.

The process for cross-impact analysis is as follows.

1. Define the attributes.
2. Develop a matrix (see Table 3 below).
3. Agree on a scoring method (eg, a scale of 1–3).
4. Individually each team member assesses each attribute against the other attributes.
5. The group meets to assess scores.

Table 3: Example of an attribute weighting matrix

	Relevant experience	Track record	Technical skills	Resources	Management skills	Methodology
Relevant experience						
Track record						
Technical skills						
Resources						
Management skills						
Methodology						

The benefit in allocating the weighting to each attribute in this way is that it is transparent, auditable and allows for each party involved in the assessment to have input to the final weightings.

Attributes should align with the overarching objectives of the services being sought. This provides clear direction to tenderers regarding the most important outcome to the principal (eg, attributes relating to highest quality or least cost). Emphasising price at the expense of attributes that provide quality should be avoided, as this can reduce contract management input over the contract period.

6 Contract Form

6.1 Conditions of contract

Conditions of contract used for waste management and recycling contracts may take several forms. The conditions most widely used by councils are based on the New Zealand Standard *NZS 3910(2003) – Conditions of Contract for Building and Civil Engineering Construction*. NZS 3910 has a traditional construction and building focus and does have shortcomings for waste and recycling collections. Waste management contracts are more aligned to maintenance contracts than construction contracts, and as a consequence the NZS 3910 conditions of contract should include Appendix C, which shifts the contractual emphasis away from a construction project orientation. Not all contractors are familiar with the conditions of NZS 3910, but with appropriate amendments the conditions are acceptable. If you decide to use NZS 3910, it is important to note its limitations when applied to waste and recycling contracts.

Some councils prefer to develop their own contract conditions for waste management and recycling services, so the conditions are more appropriate for their particular situation.

6.2 Term

A five- to seven-year contract term is generally recommended for waste management and recycling contracts. A 14-year term is considered more suitable for material recovery facilities.

For more information

Environmental Protection Authority, South Australia, *Survey and Audit of Kerbside Waste and Recycling Practices*, 2002: http://www.epa.sa.gov.au/pdfs/kerbside.pdf

There are advantages to longer-term contracts where:

- long term certainty is required
- the contractor is required to invest in specialised and expensive equipment
- the service scope is conceptually simple and unlikely to change
- there are price advantages
- the cost of contract creation or expensive plant is proportionally less.

On the other hand, the advantages of short-term contracts can be:

- a capacity for introducing change and retaining certainty of contract scope over time
- more exposure to competition
- more exposure to technology and other improvements.

Longer-term contracts can also be awarded with a provision for either set review dates or contractor/principal-initiated reviews at any time throughout the contract term. This is to allow for technological changes that may occur during the term, which either party may wish to introduce to the services. These reviews also encourage investment and upgrading of plants. A disadvantage of this is the high capital investment for plant and infrastructure, and its amortisation is required over a shorter timeframe, resulting in a commensurate contract price. A further consideration is a council's ability to increase budgetary provision at short notice. The term of the contract may also be influenced by the service objectives and if it is a longer-term contract then it is important to maintain flexibility.

For more information

Ministry for the Environment 2004. *Review of Waste Management Contracts*. Ministry for the Environment: Wellington.

6.3 Core elements of service specification

A number of core elements need to be addressed when specifying services in a waste management or recycling contract. These include:

- the advantages/disadvantages of using prescriptive versus non-prescriptive specifications
- maintaining flexibility to implement service delivery changes (outside of contract review and renewal dates)
- linking innovation to service objectives
- targets/incentives that set parameters for change
- appropriate services for multi-tenanted buildings
- business continuation plans
- contract management
- quality standards to reduce the contamination rates of recyclables.

For more information

There are examples of best practice service specifications in contracts. An example is *The Model Waste and Recycling Collection Contract*, which is a tool that helps councils streamline the tendering process by providing a comprehensive tendering package. The model contract was developed in NSW, Australia, in consultation with councils, collection contractors and industry: http://www.resource.nsw.gov.au/publications.htm#mcc_reg
EcoRecycle: http://www.sustainability.vic.gov.au
Resource NSW: http://www.environment.nsw.gov.au/education/index.htm

6.4 Key performance indicators (KPIs)

There are a number of recognised systems for measuring contract performance through the use of key performance indicators (KPIs). KPIs can be based on either incentives for good performance or penalties for poor performance, although incentives are the preferred approach. The objective of KPIs is not to structure or assess them to score the contractor down to save money. The emphasis should be on assessing performance by the quality of service delivery. One key measure of performance should be the level of waste minimisation.

The set of KPIs should ideally be:

- limited in number
- specific
- measurable
- easy to administer
- transparent
- objective
- agreed.

The content of KPIs varies with the contract service, but generally waste management and recycling contracts cover performance for most of the following:

- customer satisfaction
- quality of the service
- health and safety
- compliance with legislative and resource consent requirements
- relationships with other stakeholders
- reporting
- maximisation of diversion of waste from landfill
- minimisation of waste disposal costs.

A tender may contain examples of KPIs that provide the tenderer with an indication of the performance measures favoured and required levels of service. The development of KPIs with the contractor following award of the contract encourages greater 'buy-in' to contract performance results. Annual reviews, where the contract parties consider whether any changes should be made to the performance assessment provisions to improve workability or better reflect good performance of the contract, can be conducted between the principal and contractor. The principal usually retains the right to implement any changes at their sole discretion.

6.5 Contractor interfaces

As outlined throughout this document, there are a number of different contractor interfaces that must be managed. The contract specification should clearly define the roles and responsibilities of parties that are expected to interface with one another and with council contract representatives.

6.6 Basis of payment

Section 3.1.7 outlines factors that relate to the basis of payment in waste management or recycling contracts. Each contract payment schedule should be unique and should accurately reflect the components of the service. It is important to recognise that the basis of payment may either encourage or discourage waste minimisation.

6.7 Cost fluctuation

It is common practice to make provision for cost fluctuations – both increases and decreases – in the cost of the service. Frequently the formula used is based on that outlined in the NZS3910 standard contract conditions, where adjustments are made using an indexation formula and indices published by Statistics New Zealand. However, take care with collection service contracts that the indices utilised in this formula reflect road transport as opposed to construction cost fluctuations.

For recycling contracts, cost fluctuations should cover collection, transportation, processing and sale of the recyclable materials. However, if the contract parties enter into a risk-sharing arrangement that includes revenue received from the sale of recyclable materials, the cost fluctuation adjustment formula would not apply to the revenue from these materials. The cost fluctuation adjustment should apply only to those amounts paid to the contractor for the collection, transportation and processing components.

7 Contract Management

7.1 Ongoing contract management

The ongoing management of the contract needs to be covered by providing for appropriate annual reviews. Solid reporting and audit programmes are essential if reviews are to be undertaken successfully. Any change to the scope of services that may be required as a result of a review must be allowable for under the contract. Changing the scope of services after a review needs to be balanced against the cost of implementing any changes and the ability to increase budgetary provision.

In addition to managing the contract, it is important to maintain a good relationship with the contractor. Often the time required for this is underestimated by the principal, especially at the beginning of the relationship. It is important that both parties be committed to growing the relationship for mutual benefit. A good relationship will achieve better outcomes from reviews and encourage innovation.

7.1.1 Reporting

When developing the contract, a structure for meeting and reporting should be included. You will need to specify reporting and deliverable requirements and their timeframes. These usually include a number of mobilisation tasks, followed by annual updates for plans and monthly reporting of trends, tonnage, health and safety, customer complaints, and any other issues/ information that the contractor or council's representative may wish to discuss and record. It is important that data on waste and recycling be comprehensive and accurate for contract administration purposes, waste management planning and long term planning.

Data should be collected in the format that best meets the requirements of the council. However, there is also an argument for standardising the format into a national format for ease of comparison and the collation of national statistics. Councils should, where possible, collect data in a format that is easily collated for national reporting. The Ministry for the Environment is working to strengthen the reporting requirements and standardise the reporting format for waste to improve the availability of information.

7.1.2 Audits

Audit programmes to ensure contract requirements are being met are common practice. Further specialised audits are also available, including the Solid Waste Analysis Protocol 2002 and participation rates for services.

For more information

http://www.mfe.govt.nz/publications/waste/solid-waste-analysis-mar02/

7.1.3 Innovation and technological changes

Innovative approaches to contract service provision, and the ability to include these and beneficial technological changes during the term of the contract, should be encouraged. This can be advantageous to both parties, especially during long term contracts. Examples of situations where this may occur include:

- either party wishes to increase the type of recyclable materials collected/sorted
- sharing of investment in market research and technological changes for plant
- other innovative approaches to handling waste or recyclables.

7.1.4 Performance review

KPIs are the critical measures in a review of performance (see section 6.4). Contracts that provide for an extension of the contract term usually contain performance review criteria, against which the decision whether to renew the contract or not is made. These are usually linked to contractor performance over recent months, as assessed by the KPIs, and other matters which council has set down in the contract as parameters for the review. The purpose of the review is to review performance and, if necessary, improve it. The purpose is not to mark the contractor down merely to save money. It is common for the council to reserve the right to renew the term of contract at their sole discretion.

7.1.5 Role of consultant as client representative

The role of the engineer's representative, the council representative, the contract representative and the client representative is sometimes undertaken by a consultant engaged by the client. The name of the client's contract representative should be highlighted in the contract document. For further clarity, the roles and responsibilities of all stakeholders can be outlined in the contract document.

Other Useful Links

Community Recycling Network (CRN): www.communityrecyclers.org.nz/default.asp

Ministry for the Environment: www.mfe.govt.nz

Packaging Council New Zealand (PAC.NZ): www.packaging.org.nz

Recycling Operators New Zealand (RONZ): www.ronz.org.nz

Sustainability Victoria: www.sustainability.vic.gov.au

WasteMINZ: www.wasteminz.org.nz/

WRAP: www.wrap.org.uk

Zero Waste Trust New Zealand: www.zerowaste.co.nz

Further Reading

Audit Commission 2000. *Management Paper – On Target: The Practice of Performance Indicators.* Audit Commission: London.

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Audit Commission 2001b. *Waste Management Guide for Improving Services*. Audit Commission: London.

Audit Commission 2001c. *Waste Management: The Strategic Challenge*. Audit Commission: London.

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Ministry for the Environment /Montgomery Watson Harza (MHW) 2004. *Review of Waste Management Contracts*. http://www.mfe.govt.nz/issues/waste/waste-mgmt-planning/index.html

Ministry for the Environment 2005. *Options for Kerbside Collection of Household Organic Wastes.* Ministry for the Environment: Wellington. http://www.mfe.govt.nz/publications/waste/kerbside-collection-may05/index.html

Ministry for the Environment 2002. *The New Zealand Waste Strategy: Towards Zero Waste and a Sustainable New Zealand.* Ministry for the Environment: Wellington. http://www.mfe.govt.nz/publications/waste/waste-strategy-mar02/index.html

NSW EPA 1994. *Kerbside Recycling Contracts: Managing the Risks.* http://www.epa.nsw.gov.au/publications/epa/waste.htm

NSW EPA 2001. *Review of NSW Kerbside Recycling Service Arrangements.* http://www.epa.nsw.gov.au/publications/epa/waste.htm

Packaging Council of New Zealand 2005. *New Zealand Packaging Accord 2004: Year One Progress Report.* http://www.packagingaccord.org.nz/

Transit New Zealand 2003. *Tender Evaluation Training Programme.* http://www.transit.govt.nz/content_files/rca/RcaNewsItem3_Attachment.pdf

URS 2005a. *A Desktop Health, Safety and Risk Assessment for Kerbside Recycling and Inorganic Collection Systems.* Prepared for Manukau City Council.

URS 2005b. *Desktop Assessment of Recycling Options.* Prepared for Manukau City Council.

WorkCover NSW 2005 *Code of Practice Collection of Domestic Waste.* http://www.workcover.nsw.gov.au/NR/rdonlyres/5CF8DD45-EEB1-42F6-924A-B40493384956/0/cop_collection_domestic_waste_1327.pdf

WRAP 2004. *The Big Picture: Specifying Recycled in Local Authority Contracts for Highways Maintenance: Good Practice.* http://www.wrap.org.uk/

WRAP 2005. *Good Practice: Procurement and the Efficient Use of Material Resources.* http://www.wrap.org.uk/

Appendix 1: Case Studies

A. Timaru District Council and EnviroWaste Services Ltd: Relationship between purchaser and provider

B. Ashburton District Council and Wastebusters Trust Canterbury: Relationship between purchaser and provider

C. Manukau City Council: Planning

D. Fonterra: Choosing the right procurement process

E. Palmerston North City Council: Council officers providing best waste management outcomes

Case Study A: Timaru District Council and Enviro Waste Services Ltd

Relationship between purchaser and provider

Key factors

The relationship developed between Timaru District Council and EnviroWaste Services for the provision of Timaru's total waste management services encompasses aspects of both partnering and alliancing as they work towards common project objectives, using a relationship mechanism for problem solving, and sharing risks and rewards.

The parties' individual objectives at the beginning of their relationship were as follows. The Council's objectives were to:

- maximum diversion of waste from landfill
- maximise the life of the existing Redruth Landfill
- achieve the above objectives at an affordable cost to the community, but not necessarily the least-cost option
- provide services as a total facility package, which included:
  - three-bin kerbside collection
  - a composting facility to process food and garden material
  - a recycle sorting facility
  - operation of a landfill and transfer stations
- liaise with one contractual party only
- realise supplier performance/innovation and flexibility for alternative options suggested by the council.

EnviroWaste Services Ltd's objectives were to:

- secure long term business with the council
- work in partnership with the Council – 'partners for mutually beneficial success'
- have the ability to look at the big picture, demonstrate knowledge and willingness to learn, have the ability to adjust, and use systems thinking
- illustrate that a 'landfill' company can fulfil a waste minimisation contract.

Process followed

The process the Council followed to reach this partnership-type arrangement began in 1999 with initial consultation with the community to help provide strategic direction. The outcome of this for the Council was to focus on developing alternative options for waste management instead of landfilling. An initial request of proposals was called for in 1999 to consider options and technologies instead of landfilling. The Council decided not to proceed with any proposals.

The implementation of any changes to waste management service provision then stalled until 2002, when the Council re-activated the process pending the requirements of the New Zealand Waste Strategy. A solid waste management plan was adopted by the Council in 2003 and forward budgets were approved in 2004, with a proposed implementation date of 1 July 2006. Council officers completed extensive research and trials of kerbside collection systems and processing of organic matter (of both food waste and garden waste). Visits to other locations and learning from best practice also helped to establish the type and level of service for the community.

Following the results of these trials, the Council endorsed a request for proposals (RFP) process in February 2005 for a total facility waste management service provision. The RFP process included the following steps:

- calling for proposals
- a briefing meeting held with all prospective submitters
- individual appointments and site visits with submitters
- evaluation of proposals received
- clarification questions asked of submitters
- shortlisting of submitters by the Council
- individual presentations from submitters to the whole Council (this step was taken due to the size of the contract, the largest the Council had ever let due to the scope of services and the length of term, as well as to achieve full buy-in from all elected members)
- further clarification questions and a breakdown of price (requested from submitters so that proposals could be fairly evaluated)
- Council acceptance of the EnviroWaste Services proposal in June 2005.

To ensure speedy implementation of the new services, a memorandum of understanding was developed between the parties. Its contents included:

- Timaru District Council's Solid Waste Management Plan objectives
- expected major outcomes
- partnership arrangements
- capital sharing – assets transfer arrangements
- community engagement
- revenue sharing – agreed levels of recyclable products for five years, to be used as a benchmark
- an open book policy
- key performance indicators for measuring and monitoring
- objectives of a contract, which would be developed within 12 months.

The initial draft of the memorandum of understanding was written by Timaru District Council staff before discussion between the parties. Legal review was completed by legal advisors of both parties.

To assist with the transition to the new services, a seven-month interim contract was developed for the operation of the landfill and transfer stations. Complete provision of the new service began on 1 July 2006.

Some of the things that went well were:

- an overall willingness between the parties to make things work and achieve the Council's objectives
- utilisation of proven technologies and support
- before the memorandum of understanding was finalised, a team of councillors, council and contractor staff completed a trip to the United States to view proposed composting systems, and both parties felt this was extremely beneficial in developing initial relationships and helped enable a preferred composting option to be selected
- people had a choice of bins, with flexibility for businesses and special cases relating to bin types and emptying frequency
- a proactive communication strategy – direct communication, especially with businesses and special cases, to determine individual requirements
- staged delivery of bins, which enabled time for staff to follow up on enquires
- hassle-free implementation for business areas
- the total collection and processing system operating within three months of full contract start, with objectives being achieved and overall community acceptance of the new system
- a special collection service of three crates for people where three bins are not suitable.

Some of the lessons learnt during the mobilisation period were as follows.

- There needs to be a longer timeframe for mobilisation (this is to be a 15-month period, continuing for four months after contract start date). This is to allow more time for civil construction, public information and consultation over service provision.
- More accurate assessment of people's requirements for bin types and a deadline to confirm their bin choice was not really effective because the Council had allowed a six-month period to change or confirm bin choices, resulting in some extra delivery. However, people did get to select the level of service for the next 15 years.
- It is important to have direct access to the suppliers of plant and infrastructure.

The final stage of the procurement process involved developing a contract, which includes:

- incorporation of the concepts from the memorandum of understanding, initial proposal and RFP requirements
- recording of the specification developed during the mobilisation period
- facility management plans
- safety, health and environment plans
- the term of contract (15 years), with provision for further extensions
- a cost escalation provision (which is important due to the long term of the contract)
- key performance indicators and reporting
- risk assessment and management arrangements
- provision for future innovation and modification of the contract.

Timeframe

Milestones for the completion of this procurement process were:

- initial strategic consultation with the community – 1999
- New Zealand Waste Strategy – 2002
- Council Solid Waste Plan – 2003
- RFP process – February 2005 to June 2005
- memorandum of understanding began – July 2005
- interim contract for landfill and transfer stations – November 2005
- memorandum of understanding signed – January 2006
- contract development – three months 2006
- start date of full contract – 1 July 2006
- official opening of facilities – 3 November 2006.

Case Study B: Ashburton District Council and Wastebusters Trust Canterbury

Relationship between purchaser and provider

Introduction

For 10 years Wastebusters Trust Canterbury (formerly Mid-Canterbury Wastebusters) has worked with Ashburton District Council in the area of waste reduction, successfully satisfying the needs of the Council and district in the ongoing management of the area's waste. Wastebusters is a 'community trust' based at Ashburton, currently contracting to three different councils, with five different council contracts. The trust employs approximately 15 full-time equivalent employees and turns over nearly a million dollars annually.

With persistence and goodwill an excellent relationship has evolved. Quite a difficult start has evolved into a good partnership. What has made this alliance so successful and what can other districts learn from this?

Key factors

- **Personnel** – the initiators of Wastebusters, Sheryl Stivens and Anita Coghill, both strong advocates for their community (and for waste minimisation), are seen as pivotal to starting this process. Council staff, Rob Rouse and councillors who have steered their council's way through this, were also crucial in achieving the outcomes.
- **Persistence –** the community initiators lobbied the Council and gradually waste minimisation became the accepted precept.
- **Patience –** it took a number of years of tension between ideals and a business model for a working partnership to evolve.
- **Education** – the school's waste minimisation programme was the starting point. Parents (some of whom were Council members) responded to the insistence of their children on 'doing the right thing'.
- **Ownership of the waste stream –** the Council accepted responsibility for the entire waste stream. Ownership allowed the Council more control of the decision-making process.
- **A strong sense of community –** community ties are strong in the district, so the development of Wastebusters has been an extension of the natural involvement and co-operation that existed already.
- **A growing sense of community –** this is illustrated by:
  - council and community recognition of those who work for the environment
  - the responses of outlying rural communities to waste problems
  - a dynamic business community gives good support at governance level, and there is good support and co-operation from the business sector
  - new initiatives (such as the recent putrescible wastes trial) came from within the community, and were not perceived as imposed by the Council.

- **A positive local media –** tells the good stories as well as the bad.
- **Celebrating success** – celebrating the partnership allows it to rise above the constituent parts and embrace the whole community.
- **The inclusion of social agendas** – the employment of marginalised groups in the operation has been part of the social agenda from the beginning. Government financial support for this has led to a decrease in this community involvement.

The result

The result of this arrangement is that the providers of the contract services (Wastebusters Trust and staff) are well respected for their:

- track record
- working relationships
- high output
- reliability
- commitment
- enthusiasm.

Over time this has seen the development of a local contractor from within the community. This operation is locally 'owned', and draws its employees from within the local community and returns a significant amount of money within the district. The payout is in terms of contracts to local engineers, local cartage firms and wages to employees, which are basically spent in the local community. Profits can also be measured through other outcomes, such as a cleaner environment and future sustainability, which have resulted from the arrangements that have been put in place.

Comparison between a community group and a commercial contractor

In general, a commercial contractor will be driven primarily by the 'economic bottom line'. In comparison, a community group will be driven by:

- a concern for the future
- community well-being
- sustainability of their local environment
- a concern for the welfare of marginalised people in their community.

As a consequence, the levels of commitment and service are higher with a community group operation.

A commercial company needs certainty of the term of the contract to commit the required resources to cover capital costs. The key to getting a council and community group to form a successful long term relationship is for each partner (council and community group) to understand the other's roles and views, which are often very different. Community groups are driven by environmental and community concerns and have an urgency to move forward. Council officers are governed by council policy and the need to follow the correct bureaucratic and democratic process.

With a commercial operator, the contract relationship is more fiscal in nature. A common consequence of this is that the contractor operates at a greater distance from the Council. This may lead to less frequent communication and the arrangement being viewed as solely a financial transaction. An appointed trustee of Wastebusters Trust Canterbury and the chief executive officer (CEO) of the Trust meet with the Council CEO each month. This gives the opportunity to have a less formal, ongoing examination of both current issues and wider activities in the ever-changing world of waste. There is an opportunity to share ideas and respond to concerns. This is a useful mechanism to discuss changes that affect the contracts (eg, the recent problems with recycled glass).

The local media have helped in this evolution by telling the good as well as the bad stories. Working constructively with the media has helped promote the good stories and the successes of the partnerships.

Finally, community groups can look outside the square. They are prepared to trial new initiatives, are elastic, and will take into account factors not always appreciated by commercial operators. This flexibility gives them a great advantage, but requires continuing liaison with all parties involved, including their community and the Council.

The role of education

When asking a community to change its habits and minimise waste, it is important to do the basics well. From the beginning, education was seen as being essential for all those involved.

A comprehensive education programme was established to service schools and the community, including a telephone helpline, composting demonstrations, and an education centre open seven days a week. Wastebusters continues to run courses for individuals wanting to learn about the Wastebusters system. The education programme run in the local schools meant that the children and grandchildren of the decision-makers were soon bringing the messages home.

After 10 years members of the community now feel they are an integral part of the programme, and take responsibility for helping solve the problem rather than seeing it as a Council problem.

In retrospect, education was an excellent starting place and it continues to be important in terms of the mature response of the ratepayers of Ashburton when dealing with managing waste and recycling.

There is the regular annual consultation through the long term council and community plan (LTCCP) process and a two-monthly newsletter to the public from the Council. This newsletter informs the community about waste-related news. Further consultation is undertaken when there is a proposed change in the level of services.

Wastebusters always plays a prominent role by taking a position on the issue and explaining the situation. Wastebusters' work with the business community has led to a supportive environment within the Ashburton business community.

The contract process

The first contract between the Council and Wastebusters was for the delivery of an educational programme to the schools and preschools of the region. This started the process of learning to work together.

The contract for the processing of recyclables was preceded by a transitional agreement, which protected both the Council and the community group. This contract allowed a period of time (six months) to confirm quantities of recyclables and prices paid for them, staffing requirements, report forms and communication needs. This period also allowed time for trust and confidence to develop on both sides.

The problem of changing commodity prices was accommodated by costing the contract to the processing and disposal of the various waste streams and not considering the revenue from the sale of the sorted material. However, as volumes increase, so do operational costs, so there are adjustments for cost fluctuations (eg, hourly wage rates, which are indexed to inflation rates). Naturally neither party wants to be exposed to extreme risk.

The down sides

Both sides agree that at certain stages during this process they have needed to take big leap of faith. It has taken a long time for a level of confidence to develop between both parties. The wider role of Wastebusters includes lobbying the Council and councillors, and this lobbying can generate tension between Wastebusters and its staff and the Council and its officers. To some extent this has prevented the development of trust between the Council officers and Wastebusters. The Council officers feel exposed as they are 'attacked' from both sides.

To help resolve this it has been suggested that the contract should include some strict lines of communication to try to mitigate the lobbying roles of the community group. Conversely, the community group often feels it is hard to have a direct voice. Because of the high level of communication, there is an intimate knowledge of each other's activities, so the community group is not treated like just another contractor.

Community group members may take individual stands over environmental issues. This can blur lines in the public's mind between official group opinion and a Council contractor's stance. While the group has an official role, it is also a community opinion leader role. Individuals within the group can sometimes be seen by the public as representing the whole when they are in fact expressing a personal opinion.

At times the trust between the group and the Council has been stretched, but the partnership has been preserved. The Council has accepted that a community business enterprise can perform well as a business, operate a range of equipment and deliver excellent service. The community group is driven to deliver 150% and is providing good value for the council.

Many hours of volunteer time have been spent developing solutions for the waste issues facing the Ashburton District. This commitment and drive have grown a reputation for innovation for the district. The research and development component, however, is generally perceived by Wastebusters as lacking recognition.

Although some changes were not popular at the time, a staunch attitude and plenty of education have led to an acceptance within the community. Difficulties frequently relate to the need for spending money now to get benefits down the track.

Conclusion and summary

- The relationship between the Ashburton District Council and Wastebusters has been difficult at times, but there is now a good supportive working partnership.
- Some difficulties still remain on both sides, but that may be the nature of the relationship.
- The Council needs to ensure the Wastebusters community group continues to be enthusiastic and robust, and to balance its needs with those of the Council.
- The community as a whole is involved in and owns the entire process.
- The interaction between Wastebusters and the Council has meant there is a shared understanding of the whole system. Both partners are able to drive change.
- Wastebusters has developed systems to meet the requirements of contracting to the Council.
- The Council has the support of Wastebusters.
- Wastebusters takes a consultation and leadership role within the wider community.
- The Council is happy with the commitment, output and reliability of their contractor.
- Ashburton has built a sense of community, and this is reflected in the choices of the population.
- Ashburton has an international reputation for this partnership.

People interviewed

- Mayor of Ashburton District, His Worship Bede O'Malley
- Ashburton District Council CEO, Brian Lester
- Deputy Mayor of Ashburton, John Leadley
- Ashburton District Councillor, Bev Tasker
- Ashburton District Council Engineer, Rob Rouse
- Ashburton District Council Recycling Officer, Tammara Page
- Wastebusters Trust Canterbury General Manager, Sheryl Stivens.

This case study was prepared and written by Jo Knight of the Zero Waste New Zealand Trust.

Case Study C: Manukau City Council

Planning

Key factors

Manukau City Council's planning for the procurement of the city's future recycling services involved a process that included:

- confirmation of the future service objectives
- elected member endorsement
- choosing the right procurement process.

Process taken

Legislation

The legislative requirement for councils to develop and maintain waste management plans (WMPs) provided the catalyst for this process to begin. A review of the Council's WMP in 2005 presented the opportunity to review the current recycling methodology.

Any envisaged change to a service must comply with the special consultative procedures of the Local Government Act and be aligned to the Council's long term council community plan (LTCCP). Manukau complied with these requirements, both through public consultation completed while reviewing the WMP and also their LTCCP.

Council officers considered shared future services with adjacent authorities and sought approval from elected members for this direction, and also to develop a memorandum of understanding that would record this relationship. The outcome has been the sharing of contract procurement with Auckland City Council.

Confirmation of service objectives

The next stage of the planning process involved the development and confirmation of service objectives. To do this, first internal discussion papers were prepared that outlined subjects for consideration and further research, and then relevant research was completed by external parties before considering any preparation of a tender document. This research took the form of support documents that looked at issues with the present kerbside recycling collection contract, including type of receptacle, health and safety, litter, types of materials collected, collection method, and future collection methods with different receptacles (eg, Mixed Recycling Bin, material recovery facility ownership). Consideration was also given to whether any trials or pilot studies were required. Council officers considered the implications of any option selection on their existing waste collection contracts for kerbside refuse and public areas.

Elected member endorsement

The third stage of the planning process involved elected member endorsement for the service objectives and entering into a shared services arrangement. A Council officer and an elected member visited some Australian sites to observe first hand the collection, acceptance and processing of recyclables. This enhanced political understanding was invaluable and helped when explaining the service options to the wider Council.

Through all the planning stages a robust political process was followed. An elected member Sounding Board met regularly to be kept informed of progress and discussed waste management policy direction. Following their endorsement, reports were made to both the committee and the full Council seeking endorsement of the different project stages. These will continue regularly during the procurement until the award of the contract.

A valuable lesson which Manukau staff had formerly learnt is the need to consider local body election timing when setting the timeframe for any changes to service delivery. A newly elected council may not share the same political will for a service as their predecessor, and, as with most councils, value for money drives political decisions.

Choosing the right procurement process

The Council considered a number of procurement options, including expressions of interest (EOI), requests for tender (RFT) and requests for information (RFI), either on a standalone or shared service basis with adjacent local authorities. Having undertaken thorough background investigations and located experienced specialist consultant advisors, it was decided that there was sufficient knowledge and understanding of the industry and processes to use the RFT process.

RFT requires less time than EOI or RFI. Working through developing shared services had taken some time, and therefore time constraints also became a consideration. To enable the shared procurement of recycling contracts with Auckland City, Manukau City Council negotiated rolling over its existing kerbside recycling contracts for two years so that Auckland and Manukau contract terminations were aligned to June 2008.

From investigations and noting trends in Australia, a decision was made to tender for separate MRF (materials recovery facility) and collection contracts. This enables the opportunity for specialisation, greater competition, and better matching of the effective life of plant and machinery to the contract term to maximise contract capital efficiency. The contract term for the MRF is expected to be around 14 years, while collection contracts are around seven years.

Timeframe

Manukau consider that planning is extremely important for the procurement of services and envisage that a three-year roll-out for the recycling service is required. Components and their timeframes include (some occur concurrently):

- preparation of internal discussion papers 2 months
- completion of research papers by external parties 4 months
- discussion and agreement for a shared services arrangement with adjacent authorities 6–9 months
- elected member endorsement (different aspects throughout the process) 18 months
- development and agreement of service objectives 6 months

- preparation of tender documents 2 months
- tender process and award of contract (may include EOI and RFT) 6 months
- mobilisation and contract commencement 12 months

Case Study D: Fonterra

Choosing the right procurement process

Key factors

Fonterra Co-operative Group (Fonterra) has a centre-led procurement team which carries out category reviews for the whole Australasian business. This team approaches procurement decisions from a total cost of ownership perspective, ensuring alignment with the wider strategic direction of Fonterra. So while there is a strong commercial focus, additional factors such as reduction in consumption, sustainability and increased innovation are considered.

This centre-led model may differ from that of many local authorities, whose services are usually procured by an individual authority, but the focus on sustainability and innovation provides many similarities to local authority procurement.

Fonterra's focus on total cost of ownership and sustainability can be clearly seen in the recent review Fonterra procurement completed for waste management services. The key factors driving the review for Fonterra's waste management procurement were:

- reduction in total waste cost
- overall reduction in waste to landfill through recycling
- alignment with the objectives of the Packaging Accord
- ongoing sustainable vendor performance through innovation.

Fonterra is also focused on reducing waste creation by encouraging its own organisation as well as key vendors to minimise waste through smarter production processes.

This approach has resulted in significant benefit to Fonterra. Over the past 2½ years Fonterra has reduced the total amount of waste to landfill by 60%. Fonterra's waste management vendors are now working closely with the co-operative to ensure these benefits are sustained and even improved.

The Fonterra procurement process

The Fonterra procurement team uses well-defined procurement processes, including standard tender, contract and evaluation procedures. The procurement process includes a review of industry trends at that particular time and the capability of the market to meet Fonterra's existing requirements, as well as the ability to be innovative.

Stakeholder engagement and communication is a key requirement to make sure all stakeholders are identified and aligned with proposed solutions. Business stakeholders develop and confirm the service specifications to ensure all the business drivers are met, including consideration of the future direction of the co-operative.

Waste management procurement strategy

Fonterra has a strategy to divert more waste from landfill. To achieve this, it has become more proactive in looking at and evaluating all the waste stream components. In addition, as a member of the Packaging Accord it has agreed to a number of waste reduction objectives that are considered important commercial factors. It was recognised that Fonterra's waste management vendors need to have similar values and goals. Therefore the process used for the waste management go-to-market process was a request for proposal (RFP), and not the conventional request for tender process. Fonterra sees the RFP as a method through which it can learn from vendors and ensure the best overall solution.

The key stakeholders involved in the waste management review and their roles in the procurement process included the procurement team, the eco-efficiency team (part of Fonterra's environmental team), and a number of key site and facilities managers. The implementation included defining a small number of targeted KPIs to drive the appropriate behaviours to ensure a sustainable lowest total cost solution. Fonterra's KPIs for waste management are:

- minimising waste transportation costs
- minimising disposal costs
- maximising recycling
- health and safety on site
- hygiene factors.

At the end of the first year the new vendor arrangements have been considered a success. The arrangements have provided Fonterra with a strong platform on which to continue building its eco-efficiency programme and to ensure it achieves the goal of reducing the amount of waste it sends to landfill by 90% by June 2010.

Case Study E: Palmerston North City Council

Council officers providing best waste management outcomes

Key factors

There were a number of key reasons why Council officers chose to follow a request for proposal (RFP) procurement process for the future processing of recyclables in Palmerston North City. These included:

- a community desire to move towards a waste minimisation and resource recovery culture, and a target recycling rate of at least 50% within five years
- adoption of a long term partnership approach with local and New Zealand recycling businesses to maximise recycling from Palmerston North and the region to provide long term improvements for the community
- a desire to retain the material in New Zealand, where possible
- current recycling processing facilities were inadequate to achieve the city's waste minimisation objectives
- the closure of the city's Awapuni Landfill in February 2007, which offered relatively low disposal costs
- the need to implement their Waste Minimisation Plan 2005 objective for the development of the Awapuni Resource Recovery and Renewable Energy Centre by February 2007, with complementary Council services
- Council officers' responsibility for providing best outcomes for waste management and minimisation for Palmerston North City in the long term.

Process taken

Level of service consultation

The process of implementing a new service began with public consultation via a survey in July 2005. A key outcome of this survey was that the community wanted to improve and expand waste minimisation and recycling initiatives throughout the city, including for green and commercial waste.

Waste Minimisation Plan consultation

The next step, which formalised the community's wishes, was through the development of the Waste Minimisation Plan 2005 (WMP). Following public consultation of the draft WMP, it was evident that there was strong community support for Strategy 3: Resource Recovery Park, with a mix of business and community involvement as the desired outcome. In support of this strategy, a firm plan was developed for the construction of the Awapuni Resource Recovery and Renewable Energy Centre, with a desired opening date of 4 December 2006 to fit with the planned closure of the Awapuni Landfill on 31 January 2007. In addition, Strategy 2 of the WMP stated a desire to increase recycling in Palmerston North.

Implementing planned service provision

To overcome the inadequate recycling processing facilities in the city, Council officers developed a Request for Proposal for recycling processing services. They also indicated that there would be possible further options for service provision, including:

- green waste, food waste and compost collection and processing
- pre-sorting of recyclable material from refuse, and possible compaction of residual waste
- a recycling service review and trial of kerbside recycling systems (including mobile recycling bins) with adjacent councils.

Recycling processing services RFP process

The Council issued an RFP calling for a long term partner to process and market recyclables (preferably located at the proposed Awapuni Resource Recovery Centre), with a future link to a visitors centre at the processing site. The Council would be actively involved in the processing and sale of all or some of the recycled material.

The proposer was asked to:

- co-operate long term with the Council to maximise recycling from Palmerston North and the region
- provide a joint sorting and processing facility
- process materials to produce a high-quality recycled product
- define service levels and/or key performance indicators for sorting, processing, contamination rates, damage rates, baling, etc
- suggest improvements to the collection service
- suggest data recording system per product
- assist with community education
- include community groups in the process (the Council supports subcontracting of appropriate activities to community groups)
- share risks and returns from selling the recycled material at a product class level
- provide a risk management plan to cover:
  - market volatility
  - failure of the collection system
  - failure of processing
  - contamination and damage rates
  - other
- discuss treatment of technological and other advances, with an option for quarterly reviews.

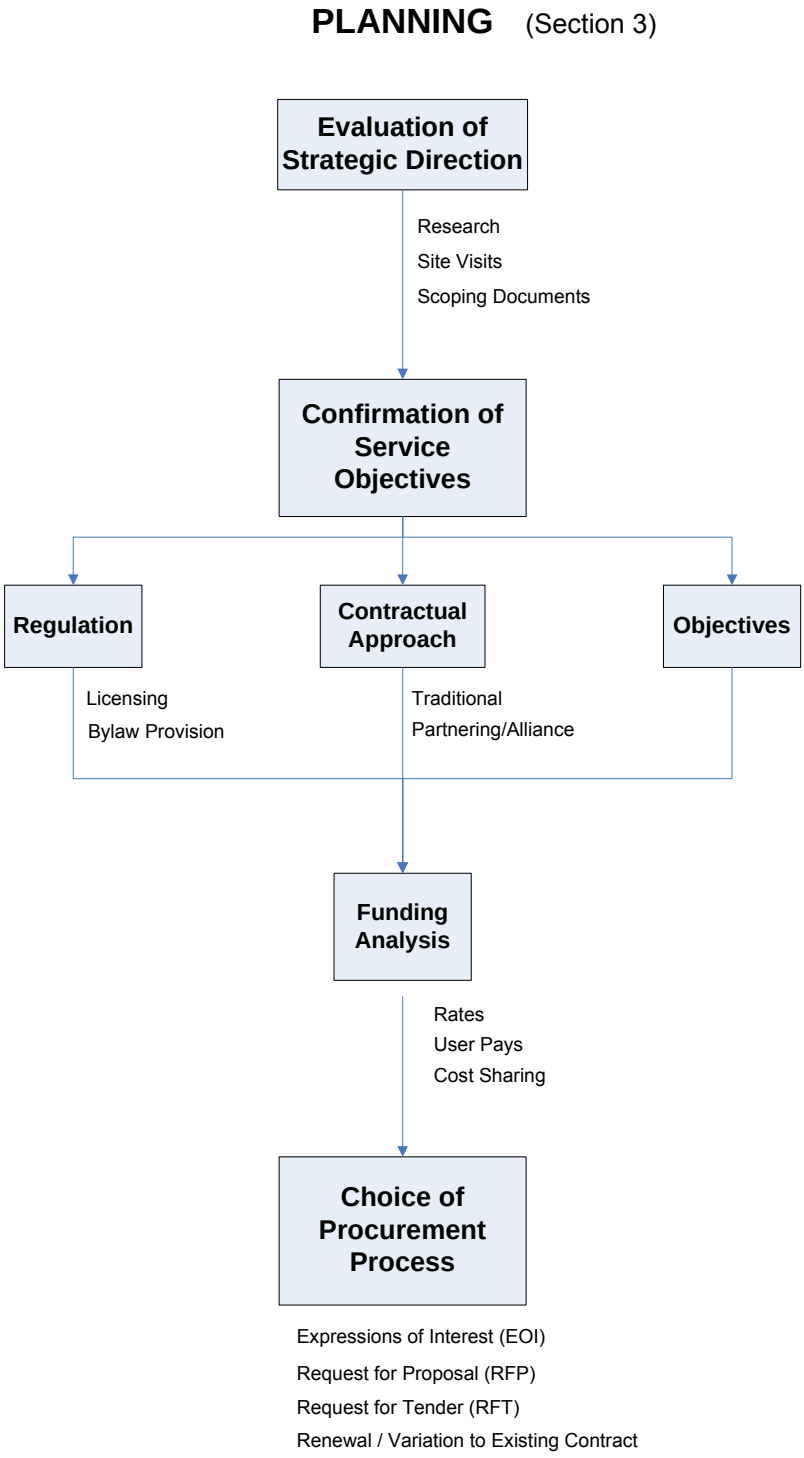
Outcome of the RFP process

The outcome of the RFP process is that a long term recycling partner has been chosen and the Council plans to develop a heads of agreement with them, followed by a contract in a few months' time. The services began on 1 November 2006. After the first six months settling-in period, the Council officers propose to undertake further procurement through requests for tender for specialised automated sorting equipment.

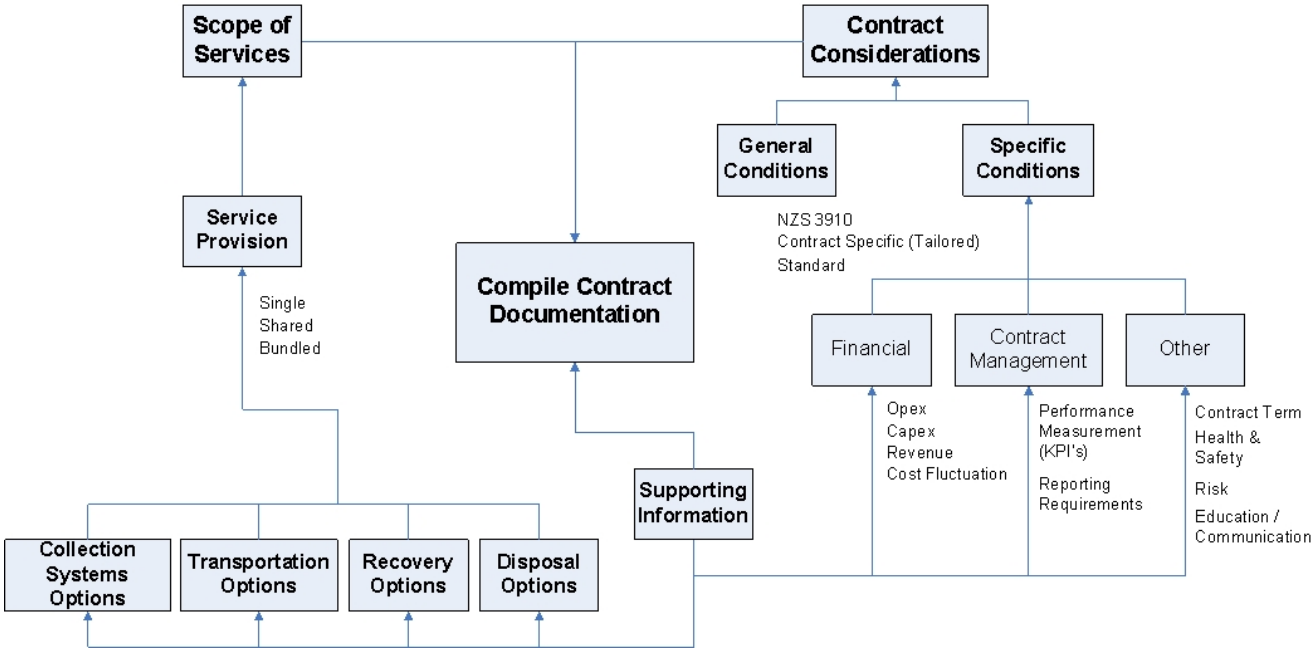
Timeframe

Level of service public consultation	July 2005
Waste Minimisation Plan 2005	October–December 2005
RFP processing of recyclables	January–March 2006
Heads of agreement and contract development	April–July 2006
RFP for sorting equipment and buildings	July 2006
Implementation period	August 2006 to January 2007
Service start date	Phase 1: 4 December 2006 Phase 2, including an office block and visitors centre, is planned for completion by February 2007

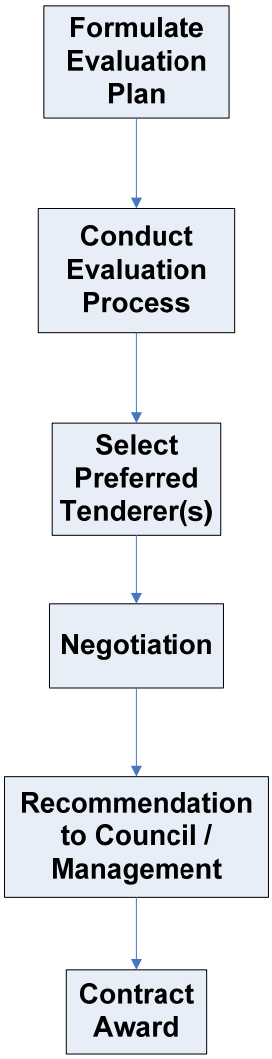
Appendix 2: Flow Charts Outlining Common Decision Processes for Procurement of Services



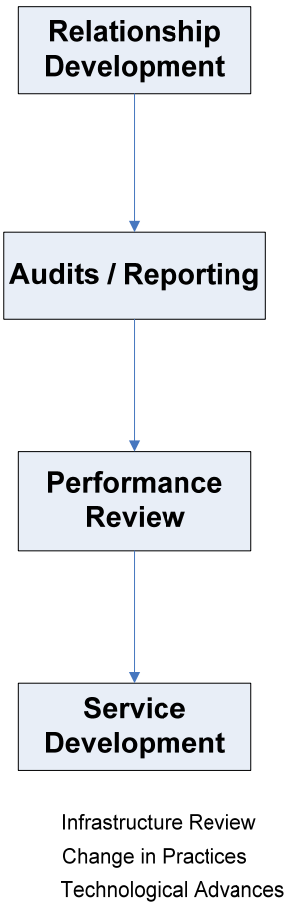
CONTRACT DEVELOPMENT (Sections 4,5 & 7)



EVALUATION (Section 6)



CONTRACT MANAGEMENT (Section 8)



Appendix 3: Tender Evaluation Plan Example

Introduction

This tender evaluation plan is a guideline only. It sets out the basic procedures for evaluating tenders.

Tender evaluation team

- Evaluation team leader and facilitator [name]
- Team member [name]
- Team member [name]

Confidentiality

No panellist shall disclose any information on tenders evaluated during or after the evaluation to any person, company or organisation, without the project co-ordinator's approval in writing.

Tender timetable

The timetable for the tendering, evaluation and selection process is as follows:

Tenders close	[Time, day and date]
Evaluation of tenders	[Times, days and dates]
Tender presentations and meetings (short-listed tenderers)	[Time, day and date]
Tender negotiations (and meetings if required)	[Time, day and date]
Tender recommendation report to be finalised and distributed as an agenda item	[Date]
Full council meeting – tender recommendation report to be presented and discussed at this meeting and decision made to allow contract to be awarded	[Date]
Contract begins	[Date]

Tender opening

- The closing date for tender submissions is [time, day and date]. The procedure for opening the tender box will be as per the council's standard procedures.
- Each envelope should contain four [this is dependent on the number of copies required] identical copies of the non-price attribute information within envelope 1. A copy of the submission and any covering letter or additional information will be distributed to each evaluation team member.
- The council will check (not an evaluation team member) each tender submission for conformity and completeness, and to make sure that no priced information has been included within the non-priced information.
- Where appropriate, alternative tenders will be identified and copies distributed to evaluation team members.
- Priced information will be left in the sealed envelopes and stored in a secure location.

Evaluation procedure

Introduction

1. This section discusses the general procedure to be followed for the tender evaluation. Following receipt of the tenders, one full set of the non-priced attributes (excluding price) is given to each team member for evaluation.
2. The tender evaluation will be undertaken using a weighted attribute method.
3. The following attributes weightings will be used as a general guideline:

Attribute	**Weighting**
Relevant experience	[insert]%
Track record	[insert]%
Technical skills	[insert]%
Resources	[insert]%
Management skills	[insert]%
Methodology	[insert]%
Innovation/waste reduction	[insert]%
Alignment with objectives and waste management plan	[insert]%
Price	[insert]%
Financial capacity	Pass/fail
Adequacy of occupational health and safety programme/standards	Pass/fail
Total	**100%**

4. The council reserves the right to depart from the stated methodology in the evaluation of the tenders. Tenderers should note that the council reserves the right to withdraw from the tender process at any time without notice before entry into a contract.

Stage 1: Evaluation of non-price attributes (conforming tenders)

5. The tender evaluation meeting will begin on [time, day and date].

6. Each evaluation team member shall individually read and evaluate the tender submissions using the marking sheets provided (as guidelines only) before the evaluation meeting.

7. During the review of tender documents, evaluation team members should collate any queries and send these through to [nominate one team member] for collation and distribution to tenderers before the evaluation team meeting.

8. Each attribute shall be marked out of 100 points, generally in multiples of 5 (sub-attribute weightings may be determined at each evaluator's discretion).

9. Team members shall use the following score definitions to determine grades for each attribute. This should help with consistency between team members and a reasonable spread of values across tenderers and attributes.

Definitions of scores

Score	Grade	Definition
< 35	Poor:	Unacceptable in this attribute and ruled out of further consideration.
36 to 45	Below average:	Below council's expectations and would need considerable improvement in this attribute if selected.
46 to 55	Average:	Adequate in most areas but some deficiencies, which are not likely to have any major adverse affect.
56 to 69	Above average:	Requirements are adequately covered in all areas. Council's expectations achieved.
70 to 85	Very good:	Requirements are fully covered in all aspects. Likely to add value beyond council's expectations through this attribute.
86 to 100	Exceptional:	Only awarded when all requirements are met in an outstanding manner, with significant added value beyond council's original expectations through this attribute.

10. If a tenderer scores less than 35% of the percentage points weighting for a particular attribute, then the council reserves the right to reject their tender. Tenderers who are unfamiliar with the weighted attribute evaluation method should contact the authorised representative for clarification.

11. If not already done, evaluation team members should collate any queries for discussion and review at the beginning of the evaluation process. If not resolved, respective tenderers will be contacted by email to clarify these issues. The clarification and removal of any tagged notes should be undertaken at this stage and confirmed in writing by the tenderer.

12. Referees will be contacted by an assistant as specified by the evaluation team, to feed back into the evaluation process. Financial, bond, insurance and corporate structure checks will also be undertaken.

13. The team will then collectively discuss each tender and their individual scores to confirm an overall team score for each attribute.

14. At the evaluation meeting, if the team consensus scores less than 35% on any one attribute, then that tender will be excluded from further consideration. However, if an individual evaluator marks any attribute less than 35%, they shall still continue to mark all other attributes for that tender.

15. In establishing the score for each attribute, it is reasonable to consider scores based on a comparison with other submissions. Therefore, the scores should fit the definitions above and should also be comparable with how other submissions meet the same attribute.

16. Team members should score each attribute and sub-attribute according to how the submissions meet the RFT requirements. It is very easy to mark tenderers that are known to the evaluator on a different basis to those unknown to the evaluator ('the devil you know' syndrome). At the team evaluation meeting anecdotes should only be shared if they are relevant to the process.

17. The process works best when marks are well spread across attributes and tenderers. Many evaluations become nonsensical if evaluators award marks in a very small band.

18. Evaluators should make notes when reading through submissions and undertaking individual evaluations. As there will be a large amount of information to read, the notes will be invaluable for distinguishing between each of the submissions and providing prompts during the evaluation meeting. All notes and evaluations must be brought to the evaluation meeting.

Stage 2: Evaluation of priced attributes (conforming)

19. Following completion of the non-priced attribute evaluation, the priced attributes are to be evaluated.

20. The price grade shall be calculated as follows:

$$\text{Grade} = \frac{50 + 100 \times (\text{median conforming tender price} - \text{tender price})}{\text{median conforming tender price}}$$

The price grade may be negative, but can only be a maximum of 100. The median conforming tender price shall be taken as the median tender price.

The weight specified for the price attribute shall be multiplied by the grade specified in the RFT and then divided by 100 to give an index for the price attribute.

Stage 3: Evaluation of indices

21. The non-price and price indices for each tender shall be summed to give an overall tender index for each tender. The overall indices for all tenders shall be documented and signed off by all evaluation panel members. All indices shall be to one decimal place. The overall index shall be rounded to the nearest whole number. When more than one tender shares the top overall index, the highest-ranked tenderer is likely be the one with the lowest price, although consideration may also be given to external attributes (eg, of the environmental qualities of the company). Some indices may be provisional and subject to clarification of queries and/or the interview/presentation.

22. A brief summary of the team's collective views on the key reasons for the tenderers' rankings for each of the attributes shall also be detailed in writing.

Alternative and non-conforming tenders

23. For consistency, it is proposed that evaluators first evaluate the conforming tender for each tenderer. This shall be followed by evaluating the non-price submission for any alternative tender submissions. The evaluation process for alternative tenders shall follow the above process for conforming tenders.

24. Only tenderers that have submitted a conforming tender shall have their alternative tender evaluated (subject to RFT clause 3.12).

25. Following this, non-conforming tenders shall be reviewed in line with the RFT clause 4.1.

26. If a decision is made to evaluate a non-conforming tender, the evaluation process shall follow the above process for conforming tenders.

Stage 4: Negotiations

27. After the Stage 3 evaluation of the tenders, the council may select one (or possibly two) preferred tenderer(s) to negotiate with.

28. The preferred tenderer(s) will be invited to attend an interview, the purpose of which includes to:
    - meet the key personnel
    - clarify any outstanding issues
    - discuss any tags
    - negotiate the scope of works
    - negotiate on price.

29. This may include a presentation to the tender evaluation team, or nominated persons from this team if appropriate. If required by the council, the presentation will be carried out at the council's office. The presentation may utilise overheads, PowerPoint or other visual methods. The presentation shall be for no more than 20 minutes, and will be followed by an informal question and answer period of a further 20 minutes.

30. This interview and presentation should be minuted and will form part of the contract if this tenderer becomes the contractor, with these minutes being attached to the contract documents for signing.

Determining the recommended tenderer

31. At the conclusion of the negotiations, the tender evaluation team will make a decision on whether the preferred tenderer will be recommended.

32. Note that if the evaluation team negotiated with more than one preferred tenderer, then following negotiations the weighted attributes will be reassessed taking into account any changes, and a final assessment made of the preferred tenderer for the purpose of making a recommendation report to the council.

End of evaluation process

33. At the end of the evaluation process all informal notes and individual scores will be collected by [name of the team leader or organisation responsible for the tender process] for destruction.

34. [Insert name of person/organisation responsible] will record summary notes at the evaluation meeting to provide verbal feedback to tenderers after the process is complete (should they request it) and to support the negotiations process.

35. Individual evaluators will not discuss the evaluation with tenderers or provide feedback on their submissions. All such queries shall be directed to [name of person responsible].

Tender recommendation report

36. The information provided in the report from the tender evaluation team will be included in the final tender recommendation report to the council. The final report will take into account all the tenders, and recommend the most favourable option for the council.

Council sign-off

37. The tender recommendation report will be forwarded to the council for final approval. The selection of the recommended tender or tenderers shall be at the sole discretion of the council.

Award of contract

38. A letter of award will be drafted by the authorised representative when the decision to award the contracts has been made by the council.

Appendix 4: Pre-non-priced Evaluation

General **Tenderer: .....**

Considerations and comments	Yes	No
Bond		
Insurance		
Health and safety		
Financial capability		
Assumptions/tags (and details):		
Other:		

Relevant experience **Tenderer: .....**

Sub-attributes for consideration	Score	Comments
Project 1 ..... • Relevance of project • Services provided • Role of company within the project • Value and duration of project • Key people involved		
Project 2 ..... • Relevance of project • Services provided • Role of company within the project • Value and duration of project • Key people involved		
Project 3 ..... • Relevance of project • Services provided • Role of company within the project • Value and duration of project • Key people involved		
Project 4 ..... • Relevance of project • Services provided • Role of company within the project • Value and duration of project • Key people involved		
Project 5 ..... • Relevance of project • Services provided • Role of company within the project • Value and duration of project • Key people involved		
Other:		
Total / 100		

Track record

Tenderer: .....

Prompts for consideration	Score	Comments
Project 1 ..... • Compliance with quality standards • Evidence of client satisfaction • Completed on time • Completed on budget • Value and duration of project and role within project • Referees		
Project 2 ..... • Compliance with quality standards • Evidence of client satisfaction • Completed on time • Completed on budget • Value and duration of project and role within project • Referees		
Project 3 ..... • Compliance with quality standards • Evidence of client satisfaction • Completed on time • Completed on budget • Value and duration of project and role within project • Referees		
Project 4 ..... • Compliance with quality standards • Evidence of client satisfaction • Completed on time • Completed on budget • Value and duration of project and role within project • Referees		
Project 5 ..... • Compliance with quality standards • Evidence of client satisfaction • Completed on time • Completed on budget • Value and duration of project and role within project • Referees		
Other:		
Total / 100		

Technical skills **Tenderer: .....**

Prompts for consideration	Score	Comments
Details of all nominated personnel and subcontractors		
Person 1: • Experience • Qualifications • Local knowledge and experience • Responsibilities • Availability and location • Other		
Person 2: • Experience • Qualifications • Local knowledge and experience • Responsibilities • Availability and location • Other		
Person 3: • Experience • Qualifications • Local knowledge and experience • Responsibilities • Availability and location • Other		
Person 4: • Experience • Qualifications • Local knowledge and experience • Responsibilities • Availability and location • Other		
General: Has the tenderer provided sufficient technical personnel to deliver the contract outcomes?		
Other:		
Total / 100		

Resources Tenderer: .....

Prompts for consideration	Score	Comments
Plant: • Appropriateness of resources • Age, condition and quality • Availability • Other		
Equipment: • Appropriateness of resources • Age, condition and quality • Availability • Other		
Facilities: • Appropriateness of resources • Age, condition and quality • Availability • Other		
Personnel: • Appropriateness of resources • Age, condition and quality • Availability • Other		
Systems: • Appropriateness of resources • Age, condition and quality • Availability • Other		
Financial: • Appropriateness of resources • Age, condition and quality • Availability • Other		
Sub-contractors: • Appropriateness of resources • Age, condition and quality • Availability • Other		
Other:		
Total / 100		

Management skills **Tenderer: .....**

Prompts for consideration	Score	Comments
Communication, liaison and reporting		
Qualifications and training		
Practical experience		
Previous experience		
Quality assurance		
Resource planning		
Financial management		
Occupational health and safety compliance		
Other:		
Total / 100		

Methodology Tenderer: .....

Prompts for consideration (these will reflect information requested from the tenderer in the conditions of tendering)	**Score**	**Comments**
Customer care / communications		
Planning and programming		
Illegally dumped refuse		
Management of employees, sub-contractors and others		
Management of workloads		
Management of collection operations: • efficiencies • co-ordination of services • cleanliness of streets • dealing with urgent requests		
Disposal facility		
Quality control		
Administration of contract: • reporting • traffic management plan • communication		
Innovation		
Mobilisation programme		
Other (eg, environmental performance):		
Total / 100		

Price **Tenderer: .....**

Prompts for consideration	Score	Comments
Price:		
Tags:		
Total / 100		