



AUDITOR-GENERAL

AUSTRALIAN CAPITAL TERRITORY



PA02/11

The Speaker
ACT Legislative Assembly
Civic Square, London Circuit
CANBERRA ACT 2601

Dear Mr Speaker

I am pleased to forward to you a Performance Audit Report titled "Data Reliability for Reporting on the ACT 'No Waste by 2010' Strategy", conducted under the authority contained in the Auditor-General Act 1996.

I would appreciate if you could arrange for the tabling of the Report in the Legislative Assembly pursuant to Section 17(4) of the Auditor-General Act 1996.

Yours sincerely

Tu Pham
Auditor-General
2 August 2004

ACT Auditor-General's Office

Performance Audit Report

Data Reliability for Reporting on the ACT 'No Waste By 2010' Strategy

July 2004

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1. EXECUTIVE SUMMARY

BACKGROUND

1.1 The *No Waste By 2010 - Waste Management Strategy* (the Strategy) outlines the vision for waste management in Canberra, which encourages the community to reduce waste generation by avoiding, reducing and reusing waste materials whenever possible, and by establishing recovery and recycling services for the remaining discarded items. The Strategy provides details on waste management practices and lists broad actions to achieve the goal of a waste free society in Canberra by 2010.

1.2 The Department of Urban Services (DUS) administers the Strategy, and reports on the progress of its implementation. DUS is responsible for the management of contracts and service agreements for a range of waste and recycling activities, which service around 123,000 households and 311,000 residents in the Territory.

1.3 This report presents a summary of the results of a performance audit that examined the reliability of the waste, recycle, and cost data, which have been used by DUS and the ACT Government for reporting and in decision-making processes. Given a number of reviews recently conducted on the progress on the implementation of the Strategy, the Audit limited its focus to the reliability of the data collected to manage and report on the Strategy, and did not involve an evaluation of the Strategy itself.

1.4 For the purpose of this Audit, ‘reliable data’ refers to data that is complete, accurate and useable.

AUDIT OBJECTIVE

1.5 The objective of this Audit was to assess the reliability of the waste, recycle, and cost data used to manage, and report on, the *No Waste By 2010 - Waste Management Strategy for Canberra*.

AUDIT OPINIONS

1.6 The opinions drawn against the audit objective are:

- i. The procedures used to collect waste data need to be improved. Potential exists for the weighbridge operator at the two landfills in the Territory (Mugga Lane and Parkwood Road) to manipulate the data recorded by the weighbridge database and for the operator to incorrectly use the coding system on the weighbridge database. In addition, a conflict of interest exists for the business that has the contract for managing both the operation of the weighbridge and the Mugga Lane landfill. Together, these matters create some risk regarding the reliability of the data generated by the relevant processes.

- ii. The processes used by DUS to collect recycle data also need to be improved. Data are incomplete and DUS is unable to ensure its accuracy. Although DUS does not have any legislative power to ensure that recycling businesses provide it with data, there is no impediment preventing DUS from having a documented and operative quality assurance framework to manage the collection, recording and reporting of recycle data to ensure the data is of the type and quality it seeks and meets the relevant Australian Standards (AS ISO 15489.1–2002).
- iii. Administration of recycling and waste data maintained in electronic format is effectively managed by DUS. Such data are appropriately protected from unauthorised alteration or removal and are easily accessible, identifiable and retrievable by authorised DUS staff.
- iv. Cost data in relation to the payments made to contractors are accurate and complete. DUS cross-checked the payment records for their accuracy and completeness and the payments were calculated in accordance with the relevant contract.

1.7 The bases for these opinions are detailed in Chapters 3-5 of the Report.

RECOMMENDATIONS FOR FUTURE ACTION

1.8 The following recommendations are made to address the Audit findings detailed in this report.

1.9 In accordance with section 18 of the *Auditor-General Act 1996*, a final draft of this report was provided to the Chief Executive of DUS for consideration and comments. The Chief Executive's response is shown following each of the recommendations for future action.

Recommendation 1 – Weighbridge operation

DUS should revise weighbridge operations and its procedures to minimise the risk of unethical conduct. This could involve adopting best practice procedures identified in a report prepared by the NSW Independent Commission Against Corruption (ICAC) in 1999 on “*Weighing the Waste: An Investigation into Conduct at Local Council Waste Depot Weighbridges at St Peters and Elsewhere*”. (Paragraphs 3.7 – 3.12)

DUS response:

Agreed

The current Mugga Lane landfill contract term expires in February 2006 and it is intended to review the operations and procedures prior to renewing the contract to ensure minimal risk of unethical conduct. The ICAC recommendations on best practice procedures have been assessed for suitability and are currently being progressively implemented where appropriate.

Recommendation 2 – Quality assurance framework

DUS should develop and document a quality assurance framework to manage the collection, recording and reporting of recycle data.
(Paragraphs 4.4 – 4.12)

DUS response: **Agreed**

The existing procedures for the collection, recording and reporting of recycling data will be fully documented under the City Management ISO 9001 accredited, Quality Assurance framework.

Recommendation 3 – Treatment of incomplete data

DUS should ensure the waste and recycle data recorded in official publications meets established Australian Standards (AS ISO 15489.1–2002) in terms of consistency and accuracy.

(Paragraphs 4.21 – 4.26)

DUS response: **Agreed in Principle**

The amount of data not received is unlikely to significantly change the figures reported and as not all recycling data is captured, the figure reported is probably slightly underestimating progress in achieving recycling. The level of data collected is however, sufficient to provide a reliable statistical analysis and to report against progress of the Strategy. Data received is managed in line with the appropriate records standard including ensuring the consistency and accuracy of the data. Nevertheless, it is reasonable to include an explanatory note when reporting the recycling information.

Recommendation 4 – Payment to contractors

DUS should formalise existing procedures for making payments to waste and recycle contractors into written procedures.

(Paragraphs 5.6 – 5.10)

DUS response: **Agreed in Principle**

While a procedure exists for the Management of Service Contracts under the Quality Assurance framework, it is agreed that a more specific procedure for processing contract payments could be developed and documented.

2. INTRODUCTION

BACKGROUND

2.1 The *No Waste By 2010 - Waste Management Strategy for Canberra* (the Strategy) outlines the vision for waste management in Canberra, provides details on waste management practices and lists broad actions requiring attention by DUS in order to achieve the goal of a waste free society in Canberra by 2010. The actions are listed and developed under the headings of Community Commitment, Avoidance and Reduction, Resource Recovery, Residual Waste Management and Creative Solutions.

2.2 DUS, which administers the Strategy, asserts that the Strategy was the first time a Government had set such a challenging goal for waste management. The Strategy encourages the community to reduce waste generation by avoiding, reducing and reusing waste materials whenever possible, and by establishing recovery and recycling services for the remaining discarded items.

2.3 With total expenditure of almost \$18m in 2002-2003, DUS manages contracts and service agreements for a range of waste and recycling activities, which service around 123,000 households in the Territory.

Table 2.1: Waste and Recycle Data, 1996-1997 to 2002-2003

							2002-2003
No. of households serviced*	114,600	118,100	117,108	119,331	121,083	123,119	123,652
Total cost (\$'000)*	\$11,889	\$12,875	\$14,400	\$14,656	\$15,039	\$16,421	\$17,960
Tonnes of waste to landfill*	237,981	265,000	252,712	259,816	224,225	220,328	207,067
Recycled waste#	230,372	230,337	330,888	341,898	354,779	398,967	466,604

Source:

* Department of Urban Services, Annual Report, various years

<http://www.nowaste.act.gov.au/strategy/statistics.html>

2.4 DUS reported that the amount of waste disposed of at ACT landfills was reduced from around 238,000 tonnes in 1996-1997 when the Strategy was introduced to 207,000 tonnes in 2002-2003. In 2002-2003, more than 466,000 tonnes of waste material that would have gone to ACT landfills were diverted to resource recovery, with major increases in the levels of garden organics, demolition waste and metals recycled.

NEED FOR RELIABLE DATA

2.5 For the purpose of this Audit, ‘reliable data’ refers to data that is complete, accurate, and useable.

2.6 The reliability of the waste and recycle data collected for the Strategy is considered a vital first step for measuring the overall success of the Strategy. Indeed, DUS has acknowledged the first step in the Strategy is to develop an accurate database on waste generated in the Territory.

2.7 Reliable data on the amounts and types of waste being generated and disposed of in the Territory is also necessary to assist with activities relevant to the Strategy, such as planning, monitoring and reporting.

2.8 The collection and maintenance of reliable waste and recycle data is consistent with the *Public Sector Management Act 1994* (ACT) and the *Territory Records Act 2002* (ACT), the latter of which came into effect in July 2003.

- The Public Sector Management Act states that ‘every person involved with the creation and/or management of public service records has a duty of care to ensure that records are managed in accordance with proper record keeping standards, plans, systems and procedures.’
- The Territory Records Act states that ‘an agency must make and keep full and accurate records of its activities.’

3. WASTE DATA

3.1 This Chapter provides the results of the Audit's assessment of the approach used by DUS in the collection and reporting of **waste data**.

SIGNIFICANT FINDINGS

- All types of waste are recorded in accordance with the coding system on the weighbridge database at landfill at Mugga Lane and Parkwood Road. It is assumed by the employer that the weighbridge operator understands the coding system used, which is considered by DUS to be self-explanatory.
- There are insufficient controls to ensure against the manipulation of data recorded in the weighbridge system by the operator.
- Potential exists for a conflict of interest for the Mugga Lane landfill operator as this contractor also sub-contracts the operation of the weighbridge.
- The electronic format DUS uses for producing waste data is appropriately managed and is protected from unauthorised alteration. The data held are easily accessible, identifiable and retrievable. There is, however, no adequate audit trail to record access and amendments to the data by authorised staff.

BACKGROUND

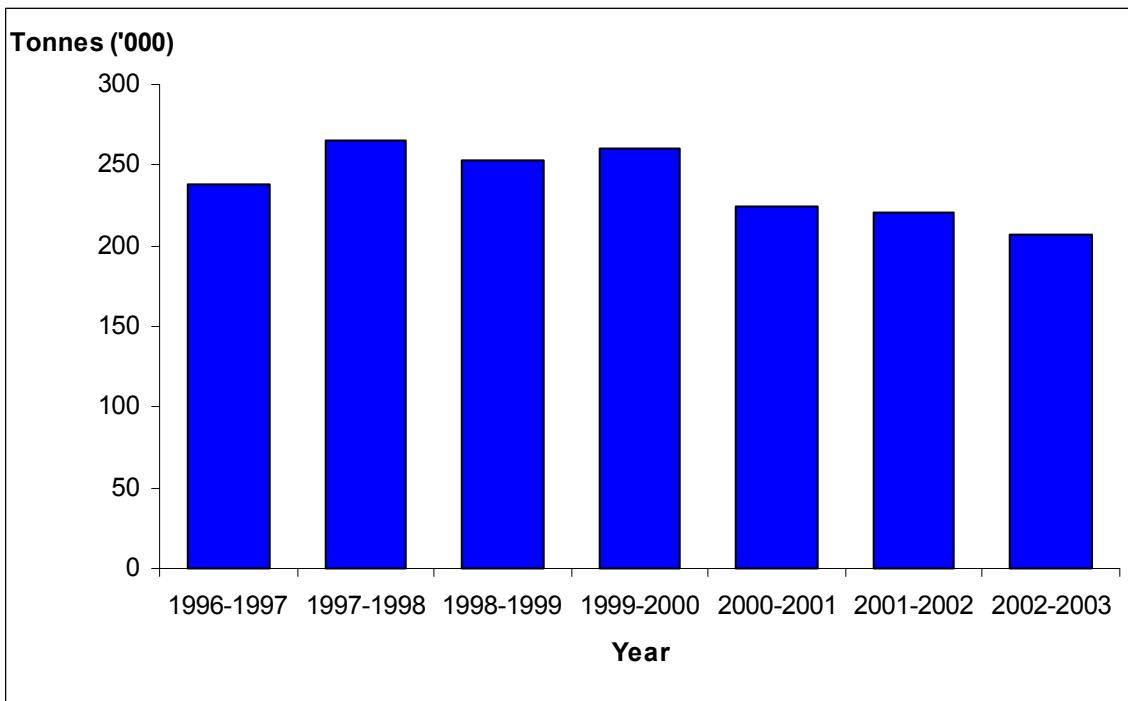
3.2 Disposal at landfills is the most common solution for handling residual waste that cannot be treated as part of other waste processing methods, such as composting, incinerating and recycling, etc. Landfills vary from open, uncontrolled dumps to sanitary landfills that are currently generally considered an effective solution for waste management notwithstanding that such landfills are not a fully acceptable environmental solution. The main differences are in the way landfills operate and the level of adverse environmental effect they produce.

3.3 The disposal of waste at landfills has historically been the primary method of waste management in the Territory. Waste materials that cannot be effectively re-used or recovered are deposited at the Mugga Lane and Parkwood Road landfills. Only authorised contractors are allowed to access these sites. The Mugga Lane landfill accepts general waste, whereas the Parkwood Road landfill accepts only special waste.

3.4 Waste material disposed at these landfills is measured using a weighbridge. A weighbridge is the building and associated equipment to weigh vehicles, categorise waste and collect customer charges. DUS process and report on the data recorded at the weighbridge at each landfill. This data are presented in various official publications and are used to manage and report on the implementation of the Strategy.

3.5 **Chart 3.1** shows data collected by DUS on the volume of waste deposited at Territory landfills between 1996 and 2002.

Chart 3.1: ACT Waste Data, 1996-1997 to 2002-2003



Source: Department of Urban Services, Annual Report, various years

OVERVIEW OF WEIGHBRIDGE OPERATIONS

3.6 DUS uses the weighbridge to measure the waste deposited by customers at the Mugga Lane and Parkwood Road landfills. The Audit noted the important role of weighbridge operations at landfill sites in:

- identifying the types of waste being deposited at the landfills;
- the collection of landfill data used to manage and report on the implementation of the Strategy and other national waste reporting;
- the future planning of landfill use and development;
- making payments to the contractor for user charges; and
- revenue collection for the ACT Government.

Weighbridge operation

3.7 For non-commercial customers, where the waste is more than half a tonne, the waste is weighed on the weighbridge. Where the waste is less than this, the weighbridge operator assesses the size of the load and the waste is charged according to whether it is a small, medium or large load.

3.8 In 2001, DUS reviewed the load size of non-commercial customers and found the average weight of small, medium and large loads of waste was 50kg, 100kg and 370kg, respectively. DUS updated the weights allocated against the codes for the load sizes in its coding system on the weighbridge database to reflect these findings.

3.9 The Audit noted that it is possible for the weighbridge operator to override the original tare weight recorded in the weighbridge database. Where the operator makes changes to the registered tare weight, the system flags any change entered. No supervisor approves changes to tare weight at the point of registration. However, the waste data that is transmitted to DUS electronically on a monthly basis enables DUS to identify any changes for later analysis and documentation.

3.10 The DUS review reported that there is no physical means to ensure that a vehicle being weighed on the weighbridge has all its wheels on the weighbridge. Also, the closed circuit television (CCTV) cameras used to monitor loads are inadequate to see whether all wheels of a vehicle are on the weighbridge. The operation of the CCTV cameras, including the images captured digitally, is not monitored in any systematic way.

3.11 It was reported by DUS that there is no CCTV to monitor the activities of the weighbridge office.

3.12 The Audit also noted that there is only one entry and exit point for vehicles arriving at the weighbridge, thereby preventing improper use of the weighbridge entrance. However, it is possible for the weighbridge operator to manually open the boom gate. There is no system in place to record this activity, a necessary internal control to prevent unethical conduct.

BEST PRACTICE

3.13 A report prepared by the NSW Independent Commission Against Corruption (ICAC) in 1999 on *Weighing the Waste: An Investigation into Conduct at Local Council Waste Depot Weighbridges at St Peters and Elsewhere* identified best practice procedures for the general operation of all weighbridges. The Commission stated appropriate procedures and equipment should ensure compliance with the following standards:

- All vehicle entries to, and exits from, the waste depot are to pass through the vicinity of the weighbridge.
- The weighbridge boom gates are to control all vehicle access to the waste depot.
- All vehicle entries to, and exits from, the waste depot are to be controlled and recorded.
- Correct weights are to be recorded on entry and exit.
- Registered tares are to be changed with the involvement of non-waste depot staff.

- Vehicles are to leave the waste depot only with the material they are authorised to remove.
- Drivers of all vehicles are to be issued with some form of documentation authorising each entry.
- Records are to be kept in a form that is routinely reconciled and auditable such that operations can be monitored and abnormalities detected.
- Video images of all vehicles are to be monitored within the weighbridge office and remotely.
- Video recording and manual entry of all vehicle registration numbers are to occur.
- Operators as well as remote monitors are to see if all wheels are on the weighbridge.
- Operators as well as remote monitors are to see the contents of open topped trucks.
- Video records of weighbridge operations and duplicate transaction records are to be stored long term at government premises.

3.14 The review carried out by DUS in 2001 to ascertain the average weight to allocate to small, medium and large loads deposited at the Mugga Lane landfill by non-commercial customers was a useful and timely exercise. That review provided an opportunity to revise the weights to determine the appropriate weight to allocate against the load sizes in the weighbridge database and to improve the overall reliability of the waste data transmitted to DUS for analysis and documentation.

3.15 Nevertheless, based on comparison to best practice as identified by ICAC, the current procedures used to measure waste material at the weighbridge are inadequate to prevent unethical conduct. Given the overall importance of the operation of the weighbridge to the collection of waste data to the management and reporting of the implementation of the Strategy, a review of weighbridge operations is warranted to ensure the correct weight is being recorded.

Recommendation 1 – Weighbridge operation

DUS should revise weighbridge operations and its procedures to minimise the risk of unethical conduct. This could involve adopting best practice procedures identified in a report prepared by the NSW Independent Commission Against Corruption (ICAC) in 1999 on “Weighing the Waste: An Investigation into Conduct at Local Council Waste Depot Weighbridges at St Peters and Elsewhere”.

3.16 DUS has responded that:

while there may be some risk in terms of collusion to fraud through the weighbridge and landfill operation contract, the subcontracting of the weighbridge limits this. It is accepted that it would be preferable to have separate weighbridge and landfill operations contracts directly with the

Territory. The Current Mugga landfill contract term expires in February 2006 and it is intended to have these activities separately contracted from that time. ACT NOWaste is aware of the ICAC reports and where appropriate their best practice procedures are progressively being implemented. Changes have been made to the closed circuit television (CCTV), recording of vehicle registrations for all transactions, changes to taring procedure and systems, all vehicles receive transaction dockets, routine reconciliations are undertaken, auditing of dockets/transactions, CCTV and electronic audit trails, and regular auditing of waste type against waste code utilised are carried out. ACT NOWaste will continue to review and improve the weighbridge procedures.

Role of weighbridge operator

3.17 The operator is required to determine and record the type and load size of all waste received at the weighbridge. All types of waste are recorded by the operator against the coding system on the weighbridge database. There is an expectation that the operator will exercise due diligence to ensure that only waste on the coding system are received at the landfill. There are, however, no guidelines available for the weighbridge operator on the use of the coding system as DUS reported that the coding system is self-explanatory.

3.18 The Audit noted that the weighbridge operator at the Mugga Lane landfill is not independent. The business contracted to operate the weighbridge is a sub-contractor of the business contracted to run and operate this landfill. There is no evidence that the operator is rotated on a regular basis, a necessary internal control to prevent unethical conduct.

3.19 From a control perspective, it is not desirable to assume the weighbridge operator fully understands the coding system on the weighbridge database. The reason for this is that the waste observed by the weighbridge operator may not necessarily be the best fit under the existing coding system and there are some waste types that could be coded under two categories of waste. For example, discarded computers and mobile phones can be classified as either chemical waste or other hazardous waste.

3.20 The implications of the existence of a conflict of interest for the business that has the contract for managing both the operations of the weighbridge and the landfill are wide-ranging. This business arrangement could adversely impact upon the reliability of the data recorded, the collection of public monies and the payment received by the contractor for its services. The reliability of the data would be compromised should the operator choose to inflate or deflate the data he/she records on the weighbridge system. This action would inevitably lead to an improper variation in the overall amount of revenue raised for the ACT Government and the payment made to the contractor.

Administration of waste data

3.21 DUS processes data collected in the weighbridge database on a monthly basis. This data are then transferred into an electronic format where the data entered is combined with other waste data types other than non-waste to landfill data, and forms the basis for published waste data.

3.22 It was evident that the waste data is securely maintained as it is restricted to those staff who have direct responsibility for the spreadsheet. These staff have authorised access to alter and remove data. For these staff, the waste data are easily accessible, identifiable and retrievable. However, there is no adequate audit trail to record access and amendments to the data by authorised staff.

CONCLUSION

3.23 The recently revised weights allocated to small, medium, and large loads at the Mugga Lane landfill have increased the overall reliability of the waste data collected to manage and report on the implementation of the Strategy. These weights more accurately reflect the actual weight of waste material deposited at this landfill from this source. As such, DUS is in a much better position to plan for future landfill use and development, including progressive targets for waste reduction.

3.24 The benefits of the revised weights to the Strategy overall, however, may not be fully realised owing to the inadequate technical internal controls at the weighbridge needed to ensure the weighbridge operator records the correct load size. This issue extends to the existing contractual arrangement between DUS and the business managing the weighbridge at the Mugga Lane landfill. Since the same business has the contract for managing both the operations of the weighbridge and the landfill, it would be difficult to put in place sufficient controls to ensure against unethical conduct in the recording of weights at the weighbridge.

4. RECYCLE DATA

4.1 This Chapter provides the results of the Audit's assessment of the approach used by DUS in the collection and reporting of **recycle data**.

SIGNIFICANT FINDINGS

- DUS requests recycling businesses to estimate the total volume (tonnage) for each type of material that these businesses have recovered from the Territory through recycling activities.
- Some recycling businesses do not respond to DUS' request for recycle data, as the provision of this information is voluntary.
- DUS does not have a written quality assurance framework to ensure the recycle data collected and recorded is of the type and quality it seeks.
- DUS does not acknowledge in its official publications that the recycle data recorded in these publications is incomplete nor does it note its treatment of the incomplete data. Also, explanations underlying the recycle data presented in official publications are absent, thereby compromising the interpretability of these data.
- The electronic format DUS uses for producing recycle data is appropriately managed and is protected from unauthorised alteration. The data held are easily accessible, identifiable and retrievable. There is, however, no adequate audit trail to record access and amendments to this data by authorised staff.

BACKGROUND

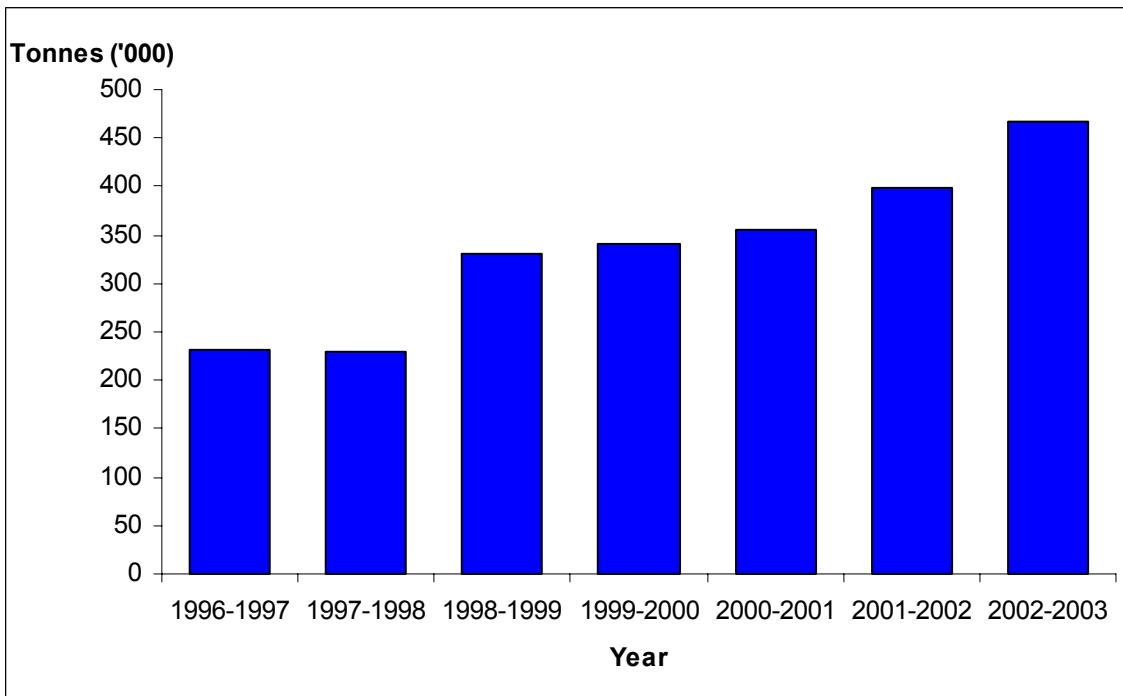
4.2 DUS provides a range of services to the Canberra community to reuse, recycle, and recover waste materials. These services include: kerbside recycling; garden organics drop-off; regional recycling centres; metal and oil recovery; and landfill salvage.

4.3 There are many recycling businesses and charity organisations in the Territory that collect, process and distribute or sell material that would have otherwise been deposited at landfill sites.

DATA REPORTED BY RECYCLING BUSINESSES

4.4 DUS collects recycle data to manage and report on the implementation of the Strategy through voluntary reporting by recycling businesses, which includes private businesses, charity organisations and government contractors.

4.5 ACT recycle data in recent years as reported by DUS is in Chart 4.1 below.

Chart 4.1: ACT Recycle Data, 1996-1997 to 2002-2003

Source: <http://www.nowaste.act.gov.au/strategy/statistics.html>

4.6 DUS records show a letter is sent out to recycling businesses at the beginning of each financial year requesting an estimate of the total volume (tonnage) of material recovered for the previous year against each type of material. Each business is asked to record this information on the ‘Recycling Statistics Return’ form. The compiled results are presented by DUS in various official publications and are used to manage and report on the implementation of the Strategy.

4.7 No recycling business is required to certify, when supplying recycle data, that these data are sufficiently reliable. However, DUS states a mutual understanding exists between them and the recycling businesses to provide sufficiently reliable data.

4.8 According to DUS, recycle data reported for the previous reference period is used as a guide to ensuring the integrity of data in the current reference period. DUS also ensures against any double counting of the same load of waste material recovered by small recycling businesses where this material is provided to large recycling businesses specialising in a particular waste type. In these circumstances, DUS counts this load only in the data provided by the large recycling businesses.

4.9 Potential difficulties with the recycle data reported by recycling businesses become even more evident when considering data on recycled garden/compost and demolition waste. In 2001-2002, nearly 80% (or 320,000 tonnes) of the waste material recycled was garden/compost and demolition waste. Some of this data is based on estimates provided by the recycling businesses, as not all of the recovered material is weighed by these businesses. Other data is based on the actual weighing of material or is assessed from volume (m³) and converted to tonnages.

4.10 In relation to the above, the Audit noted that DUS does not have an auditable means to verify or ensure the reliability of data provided by recycling businesses and other entities. These businesses are under no obligation to provide reliable data in response to DUS' requests, and it does not seek from the businesses an assurance that the data provided is sufficiently reliable.

4.11 The Audit also noted that DUS has not developed any standards or guidelines to assist with its collection of recycle data to ensure that it meets both Territory and Australian Standards on the recording and reporting of recycle data. The reason for this is that DUS is of the view that there are no specific standards or guidelines applicable to the collection of recycle data.

BEST PRACTICE

4.12 The statutory basis for record keeping in the ACT Public Service is set out in the *Territory Records Act 2002*. This Act requires all Territory agencies to make and keep full and accurate records of their business activities through the development and maintenance of a Records Management Program. Required elements of the Program are set out in section 16 of the Act.

4.13 The Territory Records Act is supported by standards, guidelines and advice approved by the Director of Territory Records. These, in turn, reflect the Principles on Full and Accurate Records developed by the Council of Federal, State, and Territory Archives (COFSTA), which have been endorsed by the Director of Territory Records as relevant to the records management requirements of the Territory. These Principles provide specific guidance on record keeping, and state that records must be complete, adequate, accurate, authentic, useable and inviolate.

4.14 Further, the Director of Territory Records has adopted the Australian Standards on Records Management AS ISO 15489 as the model for best record keeping. The Australian Standards are consistent with and complement the COFSTA Principles. The Standards are comprehensive and self-explanatory.

4.15 Thus there is a comprehensive suite of authoritative documents that describe best practice in record keeping, including the Territory Records Act, standards, guidelines and advice approved by the Director of Territory Records, COFSTA Principles on Full and Accurate Records, and the Australian Standards on Records Management. These documents are all relevant to the recording and reporting of recycle data by DUS, and offer a sound framework from which DUS can improve its overall management of data relating to the Strategy. A key feature of these best practices is the recommendation that government bodies should develop and implement policies and procedures to manage all aspects of record keeping.

4.16 For example, to ensure the authenticity of records, the relevant Standard states that organisations should implement and document policies and procedures which control the creation, receipt, transmission, maintenance and disposition of records to ensure that records creators are authorised and identified and that records are protected against unauthorised addition, deletion, alterations, use and concealment.

4.17 The Audit considers there would be value in DUS developing and documenting a quality assurance framework to manage the collection, recording and reporting of recycle data.

4.18 A suitable quality assurance framework, including procedures, for recycle data could be derived from generic guidance on data collection, analysis, and documentation. The focus of the framework would be to ensure the reliability of data.

Recommendation 2 – Quality assurance framework

DUS should develop a written quality assurance framework to manage the collection, recording and reporting of recycle data.

4.19 DUS has responded that:

It is agreed that the existing procedures for the collection, recording and reporting of recycling data will be fully documented under the City Management ISO 9001 accredited, Quality Assurance framework.

INCOMPLETE DATA

4.20 DUS acknowledges that some recycling businesses do not respond to its request for data and attribute this non-response rate to the voluntary nature of the request. DUS claims that the volume of recycle waste not reported due to non-response is estimated to be less than 5% of the total recyclable waste recovered. The basis for this estimate is unsubstantiated as DUS was not able to explain to the Audit how it arrived at this figure.

4.21 The Audit also noted there is other recycle data that is not collected by DUS. Data on recycled waste from the Kingston Foreshore Redevelopment project is one such example. DUS explained that this data was not collected for the following reasons:

- the Project recycles much of the construction and demolition waste on site, thus making it difficult to obtain the relevant data;
- the Project is relatively short term; and
- the inclusion of this data may artificially inflate the recycle data and make benchmarking and comparison with previous years problematic.

4.22 DUS advised the Audit that ‘artificially inflating’ recycle data ‘with one-off large-scale projects does not provide consistent and reliable data that can be used to accurately compare each year’s information’ and report progress in implementation of the strategy.

4.23 The Audit considers that development projects of various sizes, including those such as the Kingston Foreshore Redevelopment, are likely to continue. The projects are likely to generate, over time, significant amounts of waste and recycle material, some of which may be recycled on site, but all of which should be included in the

overall tallies of the recycle data reported by DUS in official publications. The omission of data from sources such as major redevelopment projects, which may in themselves take place over several years, means that DUS does not capture a realistic or reliable view of waste management practices needed for measuring the overall success of the Strategy.

4.24 The Audit found that DUS does not acknowledge that the recycle data recorded in official publications is incomplete nor does it note its treatment of the incomplete data. Because the final data presented in official publications is incomplete, the results cannot be sufficiently relied upon as a true and accurate record of the recycle data collected in the reference period.

4.25 The Audit also found that explanations underlying the data presented in official publications are absent, thereby potentially compromising the interpretability of these data. Information on data limitations should be provided to advise users that caution should be exercised when interpreting these data.

4.26 The Audit considers that adopting a number of measures to address this issue could strengthen DUS' approach to improving the reliability of recycle data. For example, DUS could require recycling business to certify that the data they provide are sufficiently reliable, or ensure that data collected is inclusive of that generated from major projects.

Recommendation 3 – Treatment of incomplete data

DUS should ensure the waste and recycle data recorded in official publications meets established Australian Standards (AS ISO 15489.1–2002) in terms of consistency and accuracy.

4.27 DUS has responded that:

The amount of data not received is unlikely to significantly change the figures reported and as not all recycling data is captured the figure reported is actually slightly underestimating progress. The level of data collected is sufficient to provide a reliable statistical analysis and to report against progress of the Strategy. Data received is managed in line with the appropriate records standard including ensuring the consistency and accuracy of the data. It is, however, reasonable to include an explanatory note when reporting the recycling information.

ADMINISTRATION OF RECYCLE DATA

4.28 DUS manually converts the data collected from contractors, independent recyclers and charity organisations into an electronic format where the data entered is combined with other waste data types. This forms the basis for published recycling statistics.

4.29 DUS recognises the importance of maintaining the reliability of the recycle data received. For example, access to the electronic data is restricted to those staff with direct responsibility for its management. For these staff, the recycle data is easily accessible, identifiable and retrievable. However, there is no adequate audit trail to record access and amendments to these data made by authorised staff.

CONCLUSION

4.30 DUS collects recycle data through voluntary reporting by recycling businesses, which includes private businesses, charity organisations, and government contractors. DUS acknowledges that there are recycling businesses that do not respond to its request for data. No recycling business is also required to certify, when supplying recycle data, that these data are sufficiently reliable. Further, DUS acknowledges that data from other sources, such as major redevelopment projects, is omitted by DUS because such data would artificially inflate the recycle data and make benchmarking and comparison with previous years problematic.

4.31 Such methods of data collection do not produce complete or accurate data, and as a consequence are unsatisfactory. The Audit considers the recycle data collected and recorded by DUS may not be of the type and quality it should seek, owing principally to having no ready means of ensuring its reliability.

4.32 In addition, to there being incomplete recycle data, DUS does not acknowledge the incomplete nature of the data in official publications. Nor does DUS note its treatment of the incomplete data. The published data therefore cannot be relied upon as a complete and accurate record of the recycle data collected in the reference period.

5. COST DATA

5.1 This Chapter examines **cost data** used by DUS for payment purposes for contracted recycling and services relating to waste material.

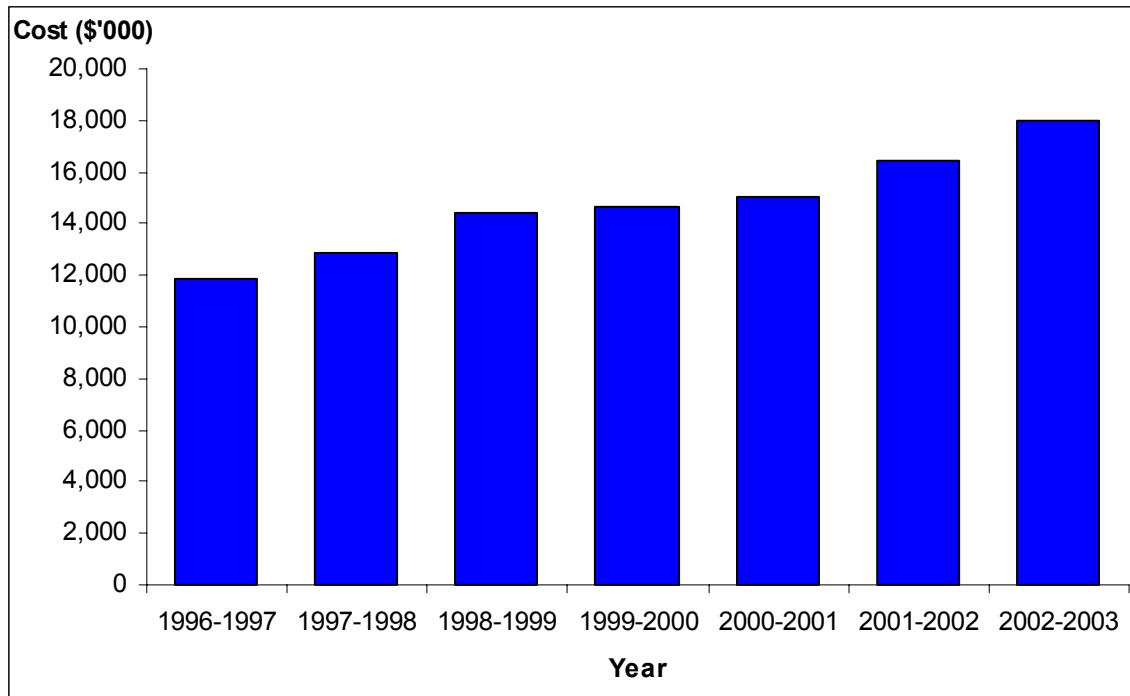
SIGNIFICANT FINDINGS

- DUS cross-checked the costs records for their accuracy and completeness and the payments made to contractors are calculated in accordance with the relevant contract.
- Detailed records are kept by DUS on how invoices were approved and decisions were taken.
- The computer database DUS uses for entering payment related data is appropriately managed and protected from unauthorised alteration.
- Written policy and procedures for making payments to contractors are not available for DUS staff.

BACKGROUND

5.2 Total DUS expenditure on waste and recycling functions in recent years is shown in Chart 5.1 below:

Chart 5.1: Total cost data, 1996-1997 to 2002-2003



Source: Department of Urban Services, Annual Report, various years

5.3 The performance of this function involves the provision of waste and recycling services, including strategic advice, strategy development, household garbage and recycling services, the implementation of waste management control measures,

resource recovery and waste information management. DUS manages seven major contracts and 36 licence agreements for a range of waste and recycling activities, which services around 123,000 households in Canberra.

5.4 The major contractors provide a range of services to manage a variety of waste activity, including but not limited to green waste (receipt and processing), the delivery of waste bins to Canberra households, domestic waste (collection and processing) and the operation of the Mugga Lane and Parkwood Road landfills. Payments made to these contractors are paid in accordance with the terms set out in their contract.

5.5 The businesses and private individuals that have licence agreements with DUS are permitted to use space and material at the landfills. They pay DUS for their usage in accordance with the terms set out in their licence agreements.

PAYMENTS TO CONTRACTORS

5.6 There are seven major contractors. A set fee is paid to three of these contractors, irrespective of their actual performance. One contractor receives payments in accordance with the volume of waste material processed. Another contractor receives a variable payment based on the frequency of the service provided. For the remaining two contractors, payment of fees varies and includes both a set fee and a variable payment.

5.7 The Audit found that DUS adopted the following procedures for making payments to the major contractors upon receipt of a tax invoice:

- DUS records are routinely verified and cross-checked for their accuracy and completeness;
- each contractor's tax invoice is reconciled with DUS' records;
- any discrepancies identified between the tax invoice and DUS records are notified to the relevant contractor for correction/ adjustment;
- any responses received by a contractor either agreeing or disagreeing to the correction/adjustment of their tax invoice is adequately documented;
- final adjustments to tax invoices and the final authorisation for approval of payments are approved by the Manager of Contracts and Asset Management, DUS;
- payments issued to contractors are made in accordance with the payment provisions set out in their contracts;
- detailed records are kept on file on how tax invoices were approved and decisions were taken.

5.8 The Audit found that DUS is thorough in its approach to making payments to the major contractors upon receipt of a tax invoice and has in place appropriate practices and record keeping measures for the purpose of making payments to contractors.

5.9 DUS' practices, however, are not supported by specific written procedures. Although some guidance is provided in a related document on management of service contracts, staff responsible for the administration of the payments rely for the most part on their corporate knowledge and competence for the performance of this activity.

5.10 The reliance on the corporate knowledge and competence of the staff to process the tax invoices reflects poor financial risk management. Better practice requires written guidance to underpin ACT public sector financial activities.

Recommendation 4 – Payment to contractors

DUS should formalise existing procedures for making payments to waste and recycle contractors into written procedures.

5.11 DUS has responded that:

While a procedure exists for the Management of Service Contracts under the Quality Assurance framework, it is agreed that a more specific procedure for processing contract payments could be developed and documented.

ADMINISTRATION OF COST DATA

5.12 DUS collects and receives data for making payments to major contractors that provide a range of recycling and waste services. These data are entered into a computer database, which form the basis for payment calculations. The data are verified and cross-checked for accuracy and completeness by DUS staff on a regular basis.

5.13 It was evident that the computer database is securely maintained as it is restricted to those staff with direct responsibility for the management of the database. For these staff, the cost data is easily accessible, identifiable and retrievable. However, there is no adequate audit trail to record access and amendments to these data made by authorised staff.

CONCLUSION

5.14 DUS manages seven major contracts and 36 licence agreements for the provision of a range of waste and recycling services. DUS has in place appropriate practices and record keeping measures for the purpose of making payments to contractors.

5.15 Although DUS adopts sound procedures for the purpose of making payments to these contractors, its practices are not supported by written procedures. Better practice requires written guidance to underpin ACT public sector financial activities. The reliance on the corporate knowledge and competence of the staff for the administration of these payments therefore reflects poor financial risk management.

Appendix A – Audit Approach

AUDIT APPROACH

In considering whether the data used to report and manage the Strategy was sufficiently reliable, the Audit examined two categories of data:

- information on **waste and recycle data** (including computer databases) received, created and maintained by DUS in undertaking its functions; and
- the **cost data** used for the purposes of making payments to waste and recycle contractors.

The Audit reviewed waste and recycle data reported by DUS in various official publications during the period 2000 to 2003, which included but was not limited to Hansard (ACT Legislative Assembly), Annual reports (Chief Minister's Department and DUS) and Progress Reports regarding the Strategy. The Audit also examined the processes used by DUS to collect, document, analyse and produce the data for official publications. For this exercise, DUS files, various computer database and numerous reports prepared by consultants were reviewed.

The Audit also examined the methods used by DUS to collect data from the various recycling businesses and the weighbridge at the two landfills in the Territory, the Mugga Lane landfill in Symonston and the Parkwood Road landfill (formerly the West Belconnen landfill) in Belconnen was also examined. For this exercise, a wide range of best practice material was also reviewed, including ACT Record Management Guidelines and the Data Quality Framework used by the Australian Bureau of Statistics.

The Audit's examination of cost data concentrated on the payments made to seven major contractors for the collection and recycling of waste material. The focus of this part of the Audit was on the accuracy and completeness of the data for the purposes of payment to the contractors.

The approach included an assessment of the various sources of information collected to arrive at a correct payment figure. The approach also included an examination of payment related information on DUS files and a computer database. The data entered into each information field in the computer database was also checked against the relevant benchmark to ensure that the corresponding cost figure was correct.

APPENDIX A

Appendix B – Australian Standard – Record Management Part 1: General (AS ISO 15489.1 2002)

This Appendix presents a brief outline of the Australian Standard – Record Management Part 1: General (AS ISO 15489.1 2002). The standard is available from Standards Australia.

Context

Australian Standard – AS ISO 15489.1 – 2002 provides best practice records management policies and procedures and is intended for use by individuals working in either public or private organisations with a duty to create and maintain records. The standard was developed in the context that all organisations should provide adequate evidence of their compliance with the legal and regulatory environment that affects their business activities and requirements to document these activities. A systematic approach to the creation, maintenance and management of records is essential for organisations to protect and preserve records as evidence of actions.

Background

The Standard applies to the management of records in all formats or media. The Standard provides guidance on determining the responsibilities of organisations for records and records policies, procedures, systems and processes as well as the design and implementation of a records management system. The standardisation of records management policies and procedures ensures that appropriate attention and protection is given to all records, and that the evidence and information they contain can be retrieved more efficiently and effectively, using standard practices and procedures.

Best Practice in records management

Policy and responsibilities

Organisations should develop a policy for records management, derived from an analysis of business functions and activities. The policy should be adopted and endorsed at the highest decision-making level and be communicated and implemented at all levels in the organisation. Organisations should define and assign records management authorities and responsibilities, and promulgate these throughout the organisation. These responsibilities should extend to all employees who create records as part of their work.

Records management requirements

Organisations should create and maintain authentic, reliable, and useable records that comply with legal and regulatory environment, applicable standards and organisational policy. Organisations should determine: what records should be created or captured; what information needs to be included in the records; the form and structure of a record; and the requirements for retrieving, using and transmitting records. Organisations should also preserve records, make records accessible, ensure the records are maintained in a safe and secure environment and ensure the records are retained for as long as needed or required. As well, organisations should protect the integrity of those records through control measures such as access monitoring,

user verification, authorised destruction and security. The measures should be implemented to prevent unauthorised access, destruction, alteration, or removal of records.

Design and implementation of a records system

The design and implementation of the records system should support business activities. A records system should be designed, modified or redesigned so that adequate records can be created and captured as a routine part of undertaking business activities. Organisations should also have formal methodologies for managing its records system. The procedures of a records system should be designed to identify what records should be created or captured. This is essential for retracing, with authority, the status, structure, and integrity of the record at any particular time and demonstrating its relationships with other records. All decisions on which records should be captured should be clearly documented and retained. A records system should have the functionality that enables it to carry out and support the records management processes and controls.

Monitoring and auditing

Organisations should regularly monitor compliance to ensure that the records systems procedures and processes are being implemented according to the organisational policies and responsibilities. Such reviews should examine organisational performance and user satisfaction with the records system.

Appendix C – Independent Commission Against Corruption Report – ‘Weighing the Waste’

This Appendix presents a brief outline of ICAC report on ‘Weighing the Waste: An Investigation into Conduct at Local Council Waste Depot Weighbridges at St Peters and Elsewhere’, June 1999.

Background

The Independent Commission Against Corruption (ICAC) conducted an investigation into corrupt conduct of weighbridge operators at a waste disposal depot owned and operated by the Sydney City Council in St Peters. A report on the investigation titles *Weighing the Waste: An Investigation into Conduct at Local Council Waste Depot Weighbridges at St Peters and Elsewhere* was published in June 1999. It was alleged that weighbridge operators at the waste depot at St Peters were accepting bribes from the operators of commercial waste disposal businesses to underestimate the actual tonnage of waste tipped at the waste depot by those businesses by manipulating the weighbridge computer system. ICAC found that the weighbridge operators engaged in corrupt conduct.

Nature of the issue

The weight assessment system at the waste depot’s weighbridge, although computerised, relied on the honesty of the weighbridge operators. The weight assessment system permitted weighbridge operators to override its calculation of the weight of waste being delivered by a vehicle and to record instead a lighter weight. The weight assessment system also permitted the weighbridge operator to omit to record any charge in respect of vehicles passing over the waste depot’s weighbridge. This meant that commercial operators could pass into the waste depot and dump the waste they were carrying free of charge, if the weighbridge operator permitted them to do so.

Best practice

The ICAC’s investigation detected deficiencies in the systems and procedures adopted by the councils operating specific waste depots. ICAC stated that government agencies have a responsibility to ensure that systems and procedures in place are as resilient to corruption as possible. To this end, ICAC identified best practice procedures for the general operation of all waste depot weighbridges. The Commission stated appropriate procedures and equipment should ensure compliance with the following standards:

- All vehicle entries to, and exits from, the waste depot are to pass through the vicinity of the weighbridge.
- The weighbridge boom gates are to control all vehicle access to the waste depot.
- All vehicle entries to, and exits from, the waste depot are to be controlled and recorded.
- Correct weights are to be recorded on entry and exit.
- Registered tares are to be changed with the involvement of non-waste depot staff.

- Vehicles are to leave the waste depot only with the material they are authorised to remove.
- Drivers of all vehicles are to be issued with some form of documentation authorising each entry.
- Records are to be kept in a form that is routinely reconciled and auditable such that operations can be monitored and abnormalities detected.
- Video images of all vehicles are to be monitored within the weighbridge office and remotely.
- Video recording and manual entry of all vehicle registration numbers are to occur.
- Operators as well as remote monitors are to see if all wheels are on the weighbridge.
- Operators as well as remote monitors are to see the contents of open topped trucks.
- Video records of weighbridge operations and duplicate transaction records are to be stored long term at government premises.

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