



MINISTRY OF DEFENCE

Ministry of Defence

MOD Waste Management Strategy 2010

Summary

MOD produces a large amount of waste (around 170,000 tonnes¹) of which 52% is reused/recycled and 42% goes to landfill. The latter has adverse impacts on the environment, such as ecosystems degradation and production of green house gas emissions. We manage and dispose of our waste through hundreds of contracts managed by Top Level Budget (TLB) and Trading Fund Agencies (TFA), usually as part of wider facility management contracts, which costs in the order of £13M² a year. These legacy contracts were not let with the requirement to reuse and recycle our waste in line with Government targets or to provide robust data on the amount of waste produced or disposed of. Therefore, it is difficult to understand how effectively we are managing our waste.

Reducing the amount of waste we produce and managing it more efficiently would save money which we could redirect to the Department's priority areas. Managing our waste more sustainably, through recycling and reusing more and landfilling less, would contribute to our efforts to become a more sustainable organisation, as set out in our Sustainable Development strategy. Managing our waste more effectively would also ensure we continue to meet legislation.

This strategy sets out our long term objective **to become a zero waste to landfill organisation**, along with accompanying targets to help us deliver this. We will achieve our objective by reducing the amount of waste we produce through our procurement and use of services and equipment, from aircraft and ships to paper and batteries, and through our behaviours and the decisions we take. We will do this as part of our commitment to integrate sustainable development principles into our everyday business.

We will improve the way we manage waste within the Department, re-using and segregating waste to help maximise recycling opportunities. We have looked at centralising our waste management provision and expertise, but in the current financial climate the up front resource required is not available.

All new waste management contracts will be let to enable delivery of our objectives and existing contracts should be revised as soon as practicable. Waste contracts also need to provide us with more accurate data so we can better understand our progress against our waste objectives and improve our cost data from waste management services. The majority of contracts that include waste management are due to be renewed or re-let by 2017 which should allow time to meet our commitments. Although some upfront investment may be required, managing our waste sustainably should be better value for money through life and we already have examples of this on our estate.

This waste strategy is owned by the Director of Business Resilience as the key SD policy owner for controlled waste, reporting to 2nd PUS as the Process Owner for Safety, Sustainable Development and Environmental Protection.

To help become a more sustainable organisation we need to manage our waste more sustainably. This will not only benefit the environment, but will have cost and reputational benefits as well. Everyone in Defence creates and disposes of waste and so everyone has a role to play in changing their behaviour to ensure we meet the aims of this strategy.

1 08/09 waste arisings as reported to SD Commission

2 Based on an industry average cost of managing a tonne of waste of £75

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This document has been equality and diversity impact assessed in accordance with Departmental policy. This resulted in a Part 1 screening only completed (no direct discrimination or adverse impact identified/ policy is a reflection of statutory requirements and has been cleared by a Legal Adviser). This policy is due for review every 3 years.

Section 1

Introduction

1.1 The Purpose of the Strategy

Defence needs to procure, use and dispose of its estate, equipment, goods and services in a way that meets Government and MOD sustainable development objectives and targets, whilst ensuring the continued effective delivery of defence capability.

This Waste Management Strategy (WMS) has been written to provide the single source of strategic direction required to ensure improved waste management in the MOD contributes to the MOD's efforts to become a more sustainable organisation and meet its high level waste objective which is to

- ◆ Become a zero to waste landfill organisation.³

This strategy is a sub-strategy under the overarching MOD Sustainable Development (SD) Strategy⁴.

1.2 Scope of the Strategy

The strategy, and its supporting Waste Management Delivery Plan, set out the targets and key actions through which the MOD will deliver more sustainable waste management. It focuses primarily on commercial⁵, and industrial⁶ controlled wastes produced by the Top Level Budgets (TLBs) and Trading Fund Agencies (TFAs) of the MOD.

³ This covers controlled wastes.

⁴ <http://www.mod.uk/DefenceInternet/AboutDefence/CorporatePublications/HealthandSafetyPublications/SSDCD/SustainableDevelopmentPolicy/>

⁵ A definition of 'commercial' waste can be found in the Environmental Protection Act 1990 S.75

⁶ A definition of 'industrial' waste can be found in the Environmental Protection Act 1990 S.75

This Strategy does not cover domestic⁷ waste arising from single living accommodation or service quarters nor those waste streams excluded from the revised Waste Framework Directive⁸.

The way the MOD procures equipment and services has the potential to significantly reduce our waste arising/increase recycling and reuse. The MOD Sustainable Procurement Strategy addresses these procurement issues.

Context

1.3 What is waste and why is waste management important?

In its broadest sense waste is in an unwanted or unnecessary element arising from the activities of an organisation. It is a resource that is in the wrong place at the wrong time⁹. More specifically, waste is defined as any substance or object which the holder discards or intends or is required to discard.¹⁰

Waste can have significant adverse impacts on the environment by contributing to¹¹:

- ◆ Resource depletion – the resources used to create a substance or object, and the subsequent disposal of that substance or object results in a loss of valuable resources;
- ◆ Greenhouse gas emissions – notably methane¹² from landfill sites but also carbon dioxide emission through re-use and recycling;
- ◆ Eco-system degradation including soils and groundwater resources – notably from landfill sites creating contaminated land and leachates.

⁷ A definition of 'domestic' waste can be found in the Environmental Protection Act 1990 S.75

⁸ Waste Framework Directive 2006/12/EC

⁹ Securing the Future – UK Government Sustainable Development Strategy

¹⁰ Waste Framework Directive 2006/12/EC

¹¹ Waste Strategy for England 2007, Defra publication

¹² The relative Global Warming Potential of methane is 23 compared to carbon dioxide which is 1.

Sustainable waste management is important in minimising such adverse impacts on the environment and ensuring the Department complies with legislation.

1.4 The legislative and policy drivers for waste management

The MOD is proactively improving its waste management practices and needs to ensure it is compliant with the external international and national policy context under which we operate.

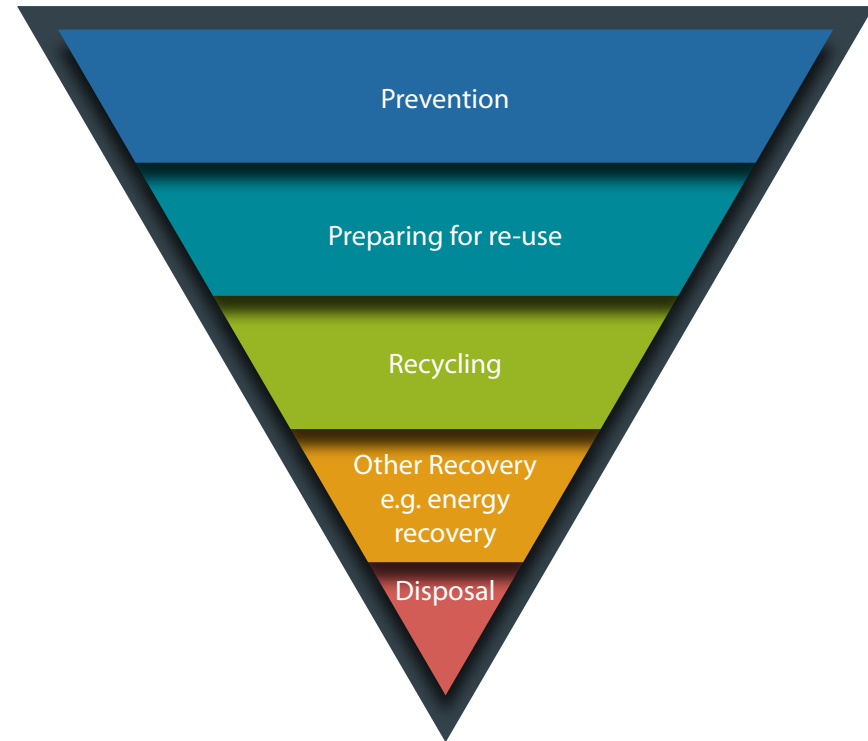
European context

One of the building blocks of the European Union’s policy on sustainable consumption and production is the Thematic Strategy on Waste Prevention and Recycling¹³.

The Thematic Strategy aims to help Europe become a recycling society that seeks to avoid waste and uses waste as a resource. Its publication was accompanied by a detailed impact assessment and a legislative proposal to amend and combine the EUs framework legislation on waste. This has been achieved in the form of the revised Waste Framework Directive which includes the Waste Hierarchy as a guiding principle for waste management options opposite.¹⁴

One of the requirements of the Waste Framework Directive is that ‘waste management plans should be drawn up in the Member States’ and to this end the Government and the Devolved Administrations (DAs) have drawn up Waste Strategies.¹⁵

The Waste Hierarchy



UK Context

As well as waste strategies, the DAs have their own statutory regimes relating to regulation of waste. The MOD, being UK-wide, needs to take account of the differing regulatory regimes with which it must comply.

Within the UK, waste management is a heavily regulated area. Waste legislation controls the generation, transportation and disposal of waste within the EU and the shipment of waste into and out of the EU. Specifically within the UK waste legislation covers controlled waste, defines duty of

¹³ EU COM(2005) 666 final
¹⁴ As set out and defined in Article 3 of the Revised Waste Framework Directive (2008/98/EC)
¹⁵ Available at www.defra.gov.uk, Available at www.scotland.gov.uk, Available at www.wales.gov.uk, Available at www.ni-environment.gov.uk

care¹⁶, registration of carriers and brokers, environmental permitting, landfill, hazardous waste, packaging waste, end-of-life vehicles, waste electrical and electronic equipment (WEEE), the trans-frontier shipment of waste and a variety of other waste streams. Many of the MOD's wide and varying activities fall under the various waste regulations covering the activities outlined above.

Details of waste legislation pertinent to MOD activities can be found in JSP 418 – The MOD Corporate Environmental Protection Manual¹⁷.

Sustainable Development in Government (SDIG) Targets

To ensure that Government departments become leaders in SD on their own estates and operations the Government issued a set of revised SD targets in March 2010 for all Government departments to meet. These cover areas such as waste, water and energy.



¹⁶ As defined in Section 34 of the Environmental Protection Act 1990

¹⁷ <http://www.mod.uk/DefenceInternet/AboutDefence/CorporatePublications/DefenceEstateandEnvironmentPublications/JSP418/> further specific waste legislation can also be found at www.netregs.gov.uk

The Government targets for waste are divided in to two areas

Waste Arisings

- ◆ Reduce waste arisings by 5% by 2010†, relative to 04/05
- ◆ Reduce waste arisings by 20% by 2016/17, relative to 2010/11

Variable targets will be set for 2016/17 to account for performance against 2010/11 target. ††

Recycling

- ◆ Increase proportion of waste arisings recycled to 40% by 2010†
- ◆ Increase waste recovery (recycling, external reuse, composting and energy from waste) to 80% of waste arisings by 2016/17, 60% of which would need to be achieved by recycling & composting

† Subsequently clarified as March 2011

†† See Waste Management Delivery Plan for MOD's targets

1.5 The Defence Perspective

The Department sets out its commitment to environmental protection in the Secretary of State's Policy Statement on Safety, Health, Environmental Protection and Sustainable Development in the MOD.¹⁸

Where are we now?

The MOD produced around 170,000 tonnes of waste in 2008/09 of which 52% was reused/recycled and 42% was landfilled, the remaining waste was

¹⁸ Available at www.mod.uk

incinerated with or without energy recovery. These waste arisings have a financial impact (modestly estimated in the region of £13m)¹⁹, on the Department. Unless the Department's waste management improves, this impact will continue to increase as the costs of waste disposal (particularly through the landfill tax) rise.

It is also important to realise that the cost of waste is not only that of disposal, the true cost of waste includes the disposal/recycling/recovery costs, the purchase cost of wasted raw material, loss of useable product and the potential liabilities due to waste.

As well as being a key contributor to the MOD's Sustainable Development Strategy, improved waste management has the potential to free up financial resource which can be redirected towards achieving the Defence Vision.

The MOD produced approximately 62% of central Government waste in 08/09, meaning that a reduction in our waste arising and an increase in recycling are crucial if Government is to achieve its waste targets.

Overseas

The Secretary of State's Policy Statement recognises that overseas we apply UK standards where reasonably practicable and, in addition, comply with relevant host nations' standards. In order to maximise the protection of the environment, human health and safety, best practical and feasible waste management practices should be applied by those planning and conducting operations to mitigate the impact of our waste arisings in the areas in which we operate. These practices should use UK, NATO or mission lead standards as appropriate including NATO STANAG 2510.

¹⁹ Assuming that the cost of managing 1 tonne of waste is £75 (industry average).

Section 2

Targets and Actions for the Delivery of the Waste Management Strategy

2.1 Targets and Indicators

In order to meet the MOD's own waste management objective, our targets are to:

- ◆ Reduce the total amount of waste generated²⁰ by:
 - ◆ 5% by 2010/11 (SOG target)
 - ◆ 20²¹% by 2016/17 (SDIG target)
- ◆ Increase waste recovery (recycling, re-use, composting and energy from waste) to:
 - ◆ 40% by 2010/11 (SOG target)
 - ◆ 80% by 2016/17 (SDIG target)^{††}

^{††} 60% of which would need to be achieved by recycling and composting

MOD will report against those targets while high level indication of how MOD is performing against its waste management objective will be provided by the following four indicators

²⁰ Against the 2007/08 baseline figure of 177,312 tonnes agreed with the Sustainable Development Commission.

²¹ Variable targets will be set for 2016/17 to account for performance against 2010/11 target. See the Waste Management Delivery Plan for MOD's targets.

- ◆ Tonnes of waste arisings
- ◆ Tonnes of waste recycled including composting
- ◆ Tonnes of waste recovered including re-use and energy from waste
- ◆ Tonnes of waste disposed of to landfill

2.2 Delivery

The Department will achieve its waste targets by taking action in the following key strategic areas:

Contracts

The MOD's waste management has historically been managed at site level and delivered as part of wider facilities management services via long term multi-activity contracts. This has resulted in multiple (in the hundreds) contracting arrangements, preventing sites from accurately measuring their waste arisings or increasing the amount of waste they recycle.

MOD recognises that if it is to meet its waste targets and high level objective then it must ensure that all contracts that include the management or disposal of waste must be aligned with the requirements of this strategy and the associated targets. All contracts must also provide accurate measured waste arisings data (by weight) from each specific waste stream (residual and recycling). Commercial branches are responsible for ensuring these conditions are implemented in contracts managing waste and that such contracts are in alignment with the requirements of this strategy.

Where existing contracts are in place there may be limited scope to amend them, including for the collection of data from companies/contractors operating on our behalf, without invoking expensive penalty clauses. However, in those circumstances we will endeavour to ensure that they

operate in line with the principles of this Strategy and that they are amended to align with the requirements of this strategy as soon as possible.

MOD Action on our Estate

While acknowledging the importance of amending our waste management contracts we will also undertake the following actions on our estate to improve our waste management:

Every key site²² will have a detailed site Waste Management Plan in place and these will be integrated in to the site Environmental Management System. Sites will include the requirement to continually improve waste data provision as a standing objective within these Integrated Waste Management Plans. As part of each plan the following actions will be undertaken:

- ◆ **Waste Stream Analysis**

As part of developing integrated Waste Management Plans waste stream analysis will be carried out on all key sites to identify: the processes that generate waste; the specific waste streams generated, and; waste streams that can be reduced/eliminated, re-used or recycled.

- ◆ **Waste minimisation & Segregation schemes**

On completion of a waste stream analysis, key sites will assess the ability to implement an active waste minimisation and segregation scheme on the site and implement it where practical.

Waste on Operations

Improved waste management on Operations will enable the Department to meet NATO requirements on waste management for NATO led missions. While Operations are the responsibility of the Chief of Joint Operations this also impacts all TLB/TFAs that contribute to the support of Operations.

For non-NATO led Operations we will implement appropriate mission led waste management practices as standard in Operations, these will be further supported by enablers such as waste stream analysis and waste minimisation initiatives.



²² As defined by TLB/TFAs, but to cover at least 80% of TLB/TFAs waste as a minimum.

Delivery by TLB/TFAs

The Department's waste arisings are generated by diverse and geographically spread activities across thousands of sites; naval bases, garrisons, airfields, repair and storage depots etc. Each TLB/TFA therefore needs a strategy (or plan) for managing their waste which sets out how they will achieve the aims and objectives of this strategy.

2.3 Construction / Demolition Waste

Construction waste is addressed separately in the Defence Estates Waste Strategy. Nationally, construction waste is a major issue with huge quantities going to landfill each year accounting for approximately 30% of all waste disposed of in England. MOD, as a major construction client, has a role to play in reducing its own construction waste and in influencing industry behaviour and best practice.

2.4 Sustainable Procurement

The way the MOD procures equipment and services has the potential to significantly reduce our waste arising/increase recycling. By embedding Sustainable Development principles in all our procurement activities the Department will reduce its waste arisings. This is addressed in the Sustainable Procurement Strategy²³.

Contractors and/or commercial companies who operate on the MOD estate must manage²⁴ their own waste in accordance with the law and under their own waste management strategy and processes.

Where companies and contractors provide a commercial service to the MOD whereby waste is a result or a bi-product of the process or the service e.g. equipment manufacture, repair or other contracted services such as mess catering or motor transport services they shall recover/dispose of

this waste via their own arrangements as the producers/owners of their own commercial waste, unless otherwise agreed by the MOD. The MOD will, however, take action to ensure that contractors dispose of this waste in accordance with the requirements of this strategy when the waste is produced on sites we occupy.

2.5 Renewable Energy

MOD recognises it needs to work closely with its suppliers and industrial partners to leverage new and emerging technologies, including energy from waste. This will contribute to the UK objective of generating 15% of energy from renewable sources by 2020 and reduce our reliance on fossil fuels. Heat or Energy from waste can provide MOD with opportunities for a more sustainable waste management solution, reduced energy costs and a security of supply for non-operation energy. Defence Estates are exploring potential options for MOD under their non-operational energy work.

²³ Available at <http://www.mod.uk/DefenceInternet/MicroSite/DES/OurTeams/BusinessGroups/SustainableProcurementTeam.htm>

²⁴ Manage means the collection, transport, recovery and disposal of waste.

Section 3

Embedding Waste Management Throughout Defence

The MOD recognises that we will only meet our waste reduction and recycling targets if we embed the awareness of waste at the heart of all decision making in Defence. We will also ensure that all MOD staff understand the importance of reducing waste and how this links to their wider work. We will achieve this through:

Leadership and Decision Making

Leadership is key to ensuring the MOD becomes more sustainable. The MOD Sustainable Development Strategy sets out how Sustainable Development (including becoming a zero waste to landfill organisation) will be embedded in MOD leadership and decision making.

Working Culture

MOD employs some 280,000 people – service persons and civilians – each of whom contribute to waste generated by the Department in the course of their work. Therefore addressing the behaviour of our staff is crucial in reducing the quantity of waste generated by the MOD. Changing the way that people behave with regards to generating waste needs to be addressed through a variety of ways;

- ◆ Engagement through on-site initiatives and good practice such as the award winning recycling projects at MOD St Athan and the Army's HQ London District;
- ◆ The department must ensure that it enables people to change their behaviour, by providing facilities to enable waste reduction and more recycling whilst removing barriers to change;

- ◆ MOD needs to set an example, by setting clear and coherent policy on waste management and minimisation;
- ◆ Finally MOD needs to encourage its people to behave in a manner that will minimise the generation of waste. Educating staff and publicising examples of best practice within the department will be a key tool for the department to build on waste reduction successes; while reinforcing the impact that Defence people have on reducing our waste. To help enable this TLB/TFAs will promote waste minimisation, reuse and recycling through appropriate communication campaigns.



Section 4

Planning for Delivery and Measuring Success

Planning and Reporting

In order to report our progress against this Strategy and the supporting Waste Management Delivery Plan, the Department will need to collect, collate and report centrally, accurate and comprehensive data on a quarterly and annual basis.

Data

Accurate data on the MOD's waste arisings is essential for the effective delivery of this Strategy and is required for reporting against the Government targets. TLBs and TFAs will collect and report their data and will establish robust and rigorous data collection systems to ensure this is met. The data that needs to be reported is set out in the supporting Waste Management Delivery Plan.

Waste produced by commercial companies/contractors providing MOD with services and support on sites we occupy should be recorded and reported to fulfil the department's commitments within the Sustainable Development in Government Framework and our corporate social responsibility.

Tools

The Department will investigate and consider the introduction of specific waste data collection tools to enable the collection of rigorous and robust waste data from the Department's activities.

Resources

The MOD takes the view that Sustainable Development should not be seen as something separate to the day-to-day business of Defence, but as an integral part of everything we do – all of our investment decisions should be made on a Sustainable basis.

Spending to improve Sustainable Development, including waste management, performance does sometimes require increased upfront investment. However, there is the potential to make long-term savings through more sustainable management of our waste and to avoid potential increased costs in the future through landfill tax increases. To support these aims we need to understand the cost of our waste management services better in the future. It is only by obtaining more accurate waste and cost data that we will understand the cost per tonne of managing our waste and therefore whether we are achieving value for money.

Strategic Risks

Delivery of this strategy largely relies on the contracts that manage our waste being aligned with the objective and targets in this strategy. The majority of these contracts are due for renewal by 2017. However, there is a risk that contracts cannot be changed in time, through reluctance of industry to deliver or unaffordable upfront cost. This is deemed to be a low risk to meet the overall objective, but may be slightly higher risk to meet the Government targets in 2017. We will target those contracts that manage large amounts of our waste in the first instance to mitigate this risk.

There is also a risk that the quality of data will not improve fast enough to enable us to understand our true progress against the objective and targets in this strategy. This also relies on obtaining better data from our contracts and so is linked to the above risk and mitigation.

A full risk register will be maintained alongside the Waste Management Delivery Plan.

Section 5

Accountability and Responsibility

Strategy Ownership

2nd PUS is the MOD Sustainable Development Process Owner, which includes the Environmental Protection Process. 2nd PUS has delegated the responsibility for key Sustainable Development policies to named owners and Director Business Resilience is responsible for Controlled Waste, overseeing the delivery of this Strategy and providing an annual assurance report to the Defence Environment and Safety Board (DESB). Progress against this strategy will be reported to the DESB as part of Sustainable Development reporting. The DESB acts as the Sustainable Development Strategy Programme Board.

Support

A Waste Management Policy Review Group (WMPRG), consisting of key waste management stakeholders across the Department, will assist in the on-going development and overview of this Strategy and its delivery.

Guidance on waste management is provided in the MOD's JSP 418 – The MOD Corporate Environmental Protection Manual²⁵.

Implementation

The implementation of this Strategy will be the responsibility of TLBs and TFAs. Monitoring the progress on implementing the Strategy will fall to the Safety, Sustainable Development & Continuity Division.

²⁵ <http://www.mod.uk/DefenceInternet/AboutDefence/CorporatePublications/DefenceEstateandEnvironmentPublications/JSP418/>

Review

The WMPRG, as the group with oversight for this strategy, shall carry out a review of the Strategy as required and at least every 2 years.

Departmental performance will be published annually alongside other MOD Sustainable Development data.



Safety, Sustainable Development and Continuity Division

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