

PAS 402:2009

Waste Resource Management – Specification for Performance Reporting



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Foreword

This Publicly Available Specification (PAS) was sponsored by Constructing Excellence in Wales (CEW) and its development was facilitated by the British Standards Institution (BSI). It came into effect on 13 July 2009.

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CEW is the umbrella body for the construction industry in Wales, which makes CEW the business organization for anyone involved with the Welsh built environment.

Funded by the Welsh Assembly Government, CEW's remit is to improve the construction process in Wales and ensure that the principles of rethinking construction as outlined in the Egan Report 1998, *Rethinking Construction* and Latham Report 1994, *Constructing the Team* become mainstream industry practice.

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The PAS process enables a specification to be rapidly developed in order to fulfil an immediate need in industry. A PAS may be considered for further development as a British Standard, or constitute part of the UK input into the development of a European or International Standard.



Relationship with other publications

This PAS has also been designed to allow waste resource management organizations to use their compliance with related publications to demonstrate performance. A related publication is one that addresses one or more of the requirements of this specification.

Detailed correspondence tables between PAS 402 and existing management system standards for the environment (BS EN ISO 14001), quality (BS EN ISO 9001), health and safety (BS OHSAS 18001) and for identifying common management system requirements as a framework for integration (PAS 99) are given in Annex A.

Detailed guidance on how to complete a waste resource management report conforming to PAS 402 is given in a supporting document published by CEW entitled, *Waste Resource Management – Guidance for Performance Reporting against PAS 402*.

Inspection. Users of this PAS are advised to consider the desirability of third party inspection of conformity to this PAS. Appropriate conformity attestation arrangements are described in BS EN ISO/IEC 17020:2004. Users seeking assistance in identifying appropriate conformity assessment bodies or schemes may ask BSI to forward their enquiries to the relevant association.

Use of this document

It has been assumed in the preparation of this PAS that the execution of its provisions will be entrusted to appropriately qualified and experienced people, for whose use it has been produced.

Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is “shall”.

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element. The word “should” is used to express recommendations, the word “may” is used to express permissibility and the word “can” is used to express possibility, e.g. a consequence of an action or an event.

Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a PAS cannot confer immunity from legal obligations.





Ministerial Statement

The publication of this specification marks a significant milestone on the road to achieving our goals for a sustainable future. PAS 402 has the potential to drive forward improvements within the waste management industry which will bring about the step change we need to achieve zero waste.

The development of the specification is a great example of how industry and government can work together in real partnership and collaboration to turn ideas into actions with mutual benefit. The use of the specification will heighten customer confidence, improve business efficiency and provide validated information for clients and government.

Landfill is no longer an option. In 2006 the UK produced 307 000 000 tonnes of waste: industry and government will need to work together to ensure that the valuable resource that was once considered to be waste is recovered and returned to use. We use far more than our share of the world's resources with each of us in the United Kingdom requiring nearly three planets to sustain our current lifestyles. Reducing our ecological footprint is an imperative, with waste accounting for nearly one sixth of this footprint it is clearly a priority.

The sponsorship of this specification reflects government's recognition of this priority and reinforces our will to succeed in ensuring a sustainable future.

I am delighted to have this opportunity to mark the publication of this national specification. My thanks go to the Constructing Excellence in Wales team and the pathfinder waste management organizations, without whose support the specification could not have been developed.

Jane Davidson AM

Minister for Environment, Sustainability and Housing
Welsh Assembly Government

Introduction

The waste industry is changing. It is no longer focused on filling holes in the ground. The industry has recognized the potential opportunities to be gained from recovering the resource in waste. In fact, waste is beginning to be considered a resource in its own right.

The aim of PAS 402 is to provide a specification for performance reporting that can be adopted by waste resource management organizations. The specification provides the framework for the demonstration of performance against key areas of delivery, including landfill diversion and materials recovery, assuring potential and existing customers of the service they are procuring.

The construction, demolition and excavation (CD&E) sector generates more waste than any other sector but it is hard to define CD&E waste because many of the component parts can be found in waste generated by other sectors. Therefore, in consultation with the waste industry, it was decided that this PAS would be developed for all types of waste however it is generated.



1 Scope

This PAS specifies requirements for performance reporting by a waste resource management organization.

It requires a waste resource management organization to report:

- a) how it conducts specific waste resource management activities (Clauses 3 to 11); and
- b) the landfill diversion and material recovery rates it achieves (Clause 12).

It is applicable to a waste resource management organization that processes industrial, commercial or household waste at a transfer station, treatment facility or disposal site.

It is not applicable to a waste resource management organization that operates solely as a waste carrier or waste broker.

NOTE 1 Detailed guidance on how to complete a waste resource management report conforming to PAS 402 is given in a supporting document published by CEW entitled, Waste Resource Management – Guidance for Performance Reporting against PAS 402 [1].

NOTE 2 Correspondence tables that show the relationship between Clauses 3 to 12 and existing management system standards are given in Annex A.

NOTE 3 Waste resource management organizations are required by legislation in England, Northern Ireland, Scotland and Wales to be authorized to perform their activities.



2 Terms and definitions

For the purposes of this PAS, the following terms and definitions apply.

2.1 business contingency plan (BCP)

documented collection of procedures and information that is developed, compiled and maintained in readiness for use in an incident to enable an organization to continue to deliver its critical activities at an acceptable pre-defined level [BS 25999-1:2006, 2.6]

2.2 client

organization that produces waste

2.3 collection

gathering of waste, including the preliminary sorting and preliminary storage of waste, for the purposes of transport to a waste treatment facility

[European Communities Directive 2008/98/EC on waste [2], Article 3(10)]

2.4 commercial waste

waste from any premises used wholly or mainly for trade, business, sport or entertainment (excluding household and industrial waste)

[Environmental Protection Act 1990 [3], abbreviation of Section 75(7)]

NOTE A detailed description of which wastes are classified as commercial waste is given in The Controlled Waste Regulations 1992 [4] and The Controlled Waste Regulations (Northern Ireland) 2002 [5].

2.5 controlled waste

household, industrial and commercial waste

[Environmental Protection Act 1990 [3], Section 75(4)]

NOTE A detailed description of which wastes are classified as household, industrial and commercial waste is given in The Controlled Waste Regulations 1992 [4] and The Controlled Waste Regulations (Northern Ireland) 2002 [5].

2.6 disposal

operation which is not recovery even where the operation has, as a secondary consequence, the reclamation of substances or energy

[European Communities Directive 2008/98/EC on waste [2], Article 3(19)]

NOTE A list of waste operations that may lead to disposal is given in European Communities Directive 2008/98/EC [2], Annex I.

2.7 disposal site

site where waste is disposed

NOTE For example, landfill.

2.8 duty of care

duty of any person who produces, imports, carries, keeps, treats or disposes of controlled waste or as a broker has control of such waste to ensure that the waste is managed properly, recovered or disposed of safely, does not cause harm to human health or pollution of the environment and is only transferred to someone who is authorized to receive it

[Defra, www.defra.gov.uk/environment/waste/legislation/duty.htm]

NOTE Duty of care is stipulated in the Environmental Protection Act 1990 [3], Section 34.

2.9 energy recovery

activity to use combustible waste as a means to generate energy through direct incineration with recovery of heat

[BS EN 13965-2:2004, 3.21]

2.10 environment

surroundings in which an organization operates, including air, water, land, natural resources, flora, fauna, humans and their interrelation

[BS EN ISO 14001:2004, 3.5]

NOTE Surroundings in this context extend from within an organization to the global system.

2.11 hazardous waste

waste which displays one or more hazardous properties

[European Communities Directive 2008/98/EC on waste [2], Article 3(2)]

NOTE A list of hazardous properties is given in European Communities Directive 2008/98/EC on waste [2], Annex III.

2.12 household waste

waste from domestic property, a caravan, a residential home, premises forming part of a university or school or other educational establishment and premises forming part of a hospital or nursing home

[Environmental Protection Act 1990 [3], abbreviation of Section 75(5)]

NOTE A detailed description of which wastes are classified as household waste is given in The Controlled Waste Regulations 1992 [4] and The Controlled Waste Regulations (Northern Ireland) 2002 [5].

2.13 incident

situation that might be, or could lead to, a business disruption, loss, emergency or crisis

[BS 25999-1:2006, 2.6]

2.14 industrial waste

waste from any factory and from any premises used for the purposes of, or in connection with, the provision of transport services, the supply of gas, water or electricity, sewerage services or postal or telecommunications services

[Environmental Protection Act 1990 [3], abbreviation of Section 75(6)]

NOTE A detailed description of which wastes are classified as industrial waste is given in The Controlled Waste Regulations 1992 [4] and The Controlled Waste Regulations (Northern Ireland) 2002 [5].

2.15 landfill

waste disposal site for the deposit of waste onto or into land

[European Communities Council Directive 1999/31/EC on the landfill of waste [6], abbreviation of Article 2(g)]

2.16 landfill diversion rate

mass of waste diverted from landfill as a proportion of the total mass of waste received

2.17 mass

quantitative measure of an object's resistance to being accelerated

NOTE In everyday usage, mass is commonly confused with weight. However, weight is the strength of the gravitational pull on an object and, hence, it is a force, measured in newtons. This difference between mass and weight is consistent with the rules described by the International System of Units (SI) and specified in BS ISO 80000.

2.18 material recovery rate

mass of waste recovered by material type as a proportion of the total mass of the same material received as waste

2.19 maximum capacity of operation

maximum mass of waste that can be processed by a waste resource management organization over a specified period of time

NOTE Values can be given in units of, for example, kilograms per day, tonnes per year and litres per week.



2.20 organization

company, corporation, firm, enterprise, authority or institution, or part or combination thereof, whether incorporated or not, public or private, that has its own functions and administration

[BS EN ISO 14001:2004, 3.16]

NOTE For organizations with more than one operating unit, a single operating unit may be defined as an organization.

2.21 organizational resource management

management of resources used by an organization in the delivery of its services to clients

2.22 recovery

operation the principal result of which is waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfil a particular function, or waste being prepared to fulfil that function, in the plant or in the wider economy

[European Communities Directive 2008/98/EC on waste [2], Article 3(15)]

NOTE Recovery includes, for example, reuse, recycling and energy recovery. A list of waste operations that may lead to recovery is given in European Communities Directive 2008/98/EC on waste [2], Annex II.

2.23 recycling

recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes, excluding energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations

[European Communities Directive 2008/98/EC on waste [2], Article 3(17)]

2.24 reuse

recovery operation by which products or components that are not waste are used again for the same purpose for which they were conceived

[European Communities Directive 2008/98/EC on waste [2], Article 3(13)]

2.25 technical appraisal

scientific analysis to determine the composition of waste

2.26 top management

person or group of people who directs and controls an organization at the highest level

[BS EN ISO 9000:2005, 3.2.7]

2.27 transfer

process of moving waste from one location to another

2.28 transfer station

site where waste is transferred from one means of transport to another

[BS EN 13965-2:2004, 3.51]

NOTE *Mostly, the waste is transferred from smaller transport units to larger ones.*

2.29 treatment

recovery or disposal operations, including preparation prior to recovery or disposal

[European Communities Directive 2008/98/EC on waste [2], Article 3(14)]

2.30 treatment facility

facility where waste is treated for recovery or disposal

2.31 visual inspection

examination by sight of a material or product for its composition and quantity

2.32 waste

substance or object which the holder discards or intends to or is required to discard

[European Communities Directive 2008/98/EC on waste [2], Article 3(1)]

2.33 waste broker

organization that arranges, on behalf of others, the transport, disposal or recovery of controlled waste but does not hold or handle it themselves

NOTE *For example, they may arrange for it to be recovered or disposed of by other organizations.*

2.34 waste carrier

organization that transports controlled waste to or from any place in the course of any business or otherwise with a view to profit

2.35 waste hierarchy

priority order of waste prevention and management strategies

NOTE *The waste hierarchy is given in the European Communities Directive 2008/98/EC on waste [2], Article 4 as:*

- a) prevention;*
- b) preparing for reuse;*
- c) recycling;*
- d) other recovery (e.g. energy recovery); and*
- e) disposal.*

2.36 waste operation

activity conducted in the collection, transport, recovery, treatment and disposal of waste

2.37 waste resource management

collection, transport, recovery, treatment and disposal of waste, including the supervision of such operations and aftercare of disposal sites

[European Communities Directive 2008/98/EC on waste [2], definition of waste management in Article 3(9)]

2.38 waste resource management organization

organization that conducts waste operations



3 General

3.1 The organization shall produce a publicly available annual report that contains the information specified in Clause 4 to Clause 12.

3.2 The report shall be approved by top management.

NOTE 1 *The report should present a full and true description, appropriate to the nature and scale of the organization. It should be written in accordance with the principles of transparency, completeness, relevance, accuracy, comparability, clarity, timeliness and auditability.*

NOTE 2 *The presentation of the report is not prescribed. Flow diagrams, charts or drawings can be used when describing an organization's operations and processes.*

NOTE 3 *Detailed guidance on how to complete a waste resource management report conforming to PAS 402 is given in a supporting document published by CEW entitled, Waste Resource Management – Guidance for Performance Reporting against PAS 402 [1].*



4 Scope of operations

The report shall define the scope of the organization's waste operations to be covered by the report, including:

- a) all environmental permitting programme numbers and/or waste management licence numbers;
- b) the organization's name or names, as detailed on its environmental permits and/or waste management licences;
- c) any permitted waste operations and waste types;
- d) any exempt waste operations and waste types;
- e) any excluded waste operations and waste types;
- f) a description of all locations where the waste operations identified in c), d) and e) are undertaken, including those locations under the organization's direct control and those locations owned by third parties;
- g) maximum capacity of operation for each of the operations identified in c), d) and e);
- h) a justification for any exclusions from the scope of the report.

NOTE *Values can be given in units of, for example, kilograms per day, tonnes per year and litres per week.*

NOTE *The identification of a waste resource management organization's permitted and exempt waste operations is covered by The Environmental Permitting (England and Wales) Regulations 2007 [7], Waste Management Licensing Regulations (Northern Ireland) 2003 [8] and The Waste Management Licensing Regulations 1994 (as amended for Scotland) [9].*

