States of Guernsey Waste Management Plan

Approved by the States on 19 July 2018



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1. PURPOSE OF THE WASTE MANAGEMENT PLAN (WMP)

To identify the wastes generated by the Community for which provision for management needs to be made for the period of 20 years from 19 July 2018, detailing the methods to be used for the management of that waste, and related matters, in accordance with section 31 of The Environmental Pollution (Guernsey) Law, 2004 (as amended) ("the Law") (see Appendix 1). This Plan identifies all solid waste and certain liquid wastes which are specially controlled wastes¹ as waste for which provision for the recovery or disposal of which needs to be made by the Waste Disposal Authority.

This Plan outlines the methods for the management of wastes, including methods for the prevention, reuse, recycling, recovery and disposal of the various types of waste generated on Guernsey. The Plan excludes the management of waste water and agricultural farm slurry which are primarily recovered and disposed of through waste water infrastructure, spreading on agricultural fields or other methods and not at public waste management sites.

This Plan replaces the previous Waste Management Plan approved by the States of Guernsey in August 2014 (as appended to Billet d'État XVI 2014).

2. CONTEXT

2.1 Waste Types

For the purpose of this Waste Management Plan (WMP), the waste produced in Guernsey and requiring specific management is broken down into the following categories:

- Household waste
- Commercial waste (including inert waste)
- Specially controlled wastes (e.g. asbestos, batteries, florescent tubes, oils, chemicals, etc.).

2.2 Background

The States approved the Waste Disposal Authority (WDA) recommendations for the Best Practical Environmental Option (BPEO) for the management of solid waste, as set out in Billet d'État IV 2012, by approving a strategy based on high recycling and waste minimisation.

¹ Specially controlled waste is waste which is so dangerous or difficult to dispose of that special measures need to be taken in respect of it. Substances prescribed as specially controlled waste are set out in the Waste Control and Disposal (Specially Controlled Waste) Regulations, 2010.

This was reflected in the Waste Management Plan approved by the States in August 2014, where the WDA recommended option for future waste management was endorsed by the former Environment Department as being within the Best Practical Environmental Options for Guernsey, described by the Environment Department as being minimisation followed by high recycling including kerbside, with either on or offisland incineration with or without Anaerobic Digestion (or potentially In Vessel Composting) of food waste.

As the Solid Waste Strategy has been implemented several changes have been necessary due to a number of factors. Although these changes have not materially altered the objectives of the Solid Waste Strategy, the Waste Management Plan requires updating to include approved changes, such as those approved following Billet d'État No. V of February 2017 in particular in relation to management of food waste. Household Waste Charging Mechanisms have also subsequently been approved (see Article X of Billet d'État XXVI of 2014, Article XIII of Billet d'État XXIV of 2017, and Article V of Billet d'État No. XI of 2018).

The approved Solid Waste Strategy focussed on the management of Household and Commercial waste, but excluded detailed information on Inert Waste produced by the Construction and Demolition industry, largely due to existing facilities for managing this waste stream. More recently it has been recognised that Longue Hougue Reclamation Site is nearing the end of its life; an Inert Waste Strategy has therefore been developed to address the future management of Inert Waste. This was considered by the States following Article XIV of Billet d'État XXIV of 2017. The policy in relation to inert waste is now being further developed in accordance with the resolutions following that States debate.

This WMP, therefore, as well as identifying the existing waste disposal and management methods used on the island, also sets out the future methods proposed to be used in accordance with the BPEOs recommended by the WDA, subject to the various actions and approvals referred to in the resolutions approved by the States on:

- 15th February 2017, pursuant to Article III of Billet d'État No V of 2017, and
- 14th December 2017, pursuant to Article XIV of Billet d'État No XXIV of 2017.

2.2.1 Components of the Solid Waste Strategy and Inert Waste Strategy

The individual elements of the Solid Waste Strategy and Inert Waste Strategy include, but are not limited to:

a. A strategy based on the Waste Hierarchy, as defined in the European Waste Framework Directive²;

² Directive 2008/98/EC of the European Parliament and of the Council, Article 4.

- b. Waste Prevention and Minimisation;
- c. 60% household recycling by the end of 2022, and 70% household recycling by the end of 2030;
- d. Household kerbside collections for dry recyclables and food waste, with an option for small businesses to opt in to the kerbside collection scheme;
- e. Provision of kerbside collection vehicles (if required);
- f. Material Recovery Facility (MRF) for co-mingled dry recyclables collected via kerbside collections from households and small businesses;
- g. MRF for commercial waste for sorting and separation of waste for recycling;
- h. A Household Waste Recycling Centre (formerly referred to as Civic Amenity site), incorporating Repair and Reuse;
- i. A rationalised bring bank service, and recycling on-the-go litter bins;
- j. Green waste reception and processing at Mont Cuet via windrows to create a soil conditioner;
- k. A Transfer Station to receive:
 - residual waste from household and commercial sources that is not suitable for recycling, for processing into Refuse Derived Fuel (RDF) for export for energy recovery;
 - segregated food waste collected from household and commercial sources for pre-processing prior to export for treatment;
 - glass for recycling;
- I. Export of RDF for off-island energy recovery via a R1 compliant Energy Recovery Facility (ERF);
- Export of pre-processed food waste for off-island treatment via Anaerobic Digestion (or similar process);
- n. Landfill of certain specially controlled/hazardous wastes only;
- Storage of certain sspecially ccontrolled wastes that cannot be managed onisland;
- Export of sspecially ccontrolled wastes for disposal via a Duly Reasoned Request acceded to by the Environment Agency in England or similar agreement with another relevant competent authority;
- q. Incineration of certain hazardous wastes (either on or off-island) (e.g. animal carcases and clinical waste);
- r. Site Waste Management Plans for construction projects, as defined in the Island Development Plan (IDP)³;

³ Billet d'État No XXVII, 2016

- S. Reuse and recycling of inert waste where possible, and where markets are available;
- t. Recovery of inert waste through diversion from disposal routes for a specific project where inert waste is required;
- u. Disposal of residual inert waste (where no recovery option is available) through land reclamation or infilling of former quarries subject to further development of the policy in accordance with the Resolutions of the States on Article XIV of Billet d'État XXIV of 2017;
- v. A household charging policy of a standing charge and pay as you throw element, and for the commercial sector cost recovery through gate fees;
- W. Legislative requirements relating to the presentation of recyclates and other waste for collection limited to households and small business premises admitted into the Parish kerbside collection services⁴, with compliance encouraged by civil fixed penalty notices;

The Environmental Pollution (Guernsey) Law, 2004 has been amended by the Environmental Pollution (Guernsey) (Amendment) Law, 2015 ("the 2015 Law"), to enable the implementation of the various elements of the solid waste strategy detailed above. The majority of amendments came into force on 17 December 2015, the exceptions being amendments in:

- (a) section 11 of the 2015 Law, in so far as it inserts a new section 32A
 (charging for waste management services) into the Environmental
 Pollution (Guernsey) Law, 2004, and
- (b) section 24 of the 2015 Law (amendment to the Competition (Guernsey) Ordinance, 2012).

⁴ Defined in relevant legislation as the Parish waste collection and transfer service.

3. THE PLAN

3.1 Description and quantities of waste

Under section 31(3)(a) of the Law, the draft Waste Management Plan is required to identify *the descriptions and quantities of waste for the recovery or disposal of which provision needs to be made during such period as may be specified.* The period specified in this Plan is 20 years starting from 19 July 2018.

The descriptions and quantities of solid waste currently requiring provision for disposal, recovery, or other waste management are shown below:

Waste Category	Household	Commercial	Total
Inert Waste		81,312	81,312
Inert Recycling/Recovery		59,185	59,185
Inert Sub-Total		140,497	140,497
Residual Waste	13,190	25,860	39,050
Recycling	12,050	18,599	30,649
Sub-Total	25,240	44,438	69,699
Total Waste	25,240	184,941	210,196

Summary of 2016 Waste Arisings Data (tonnes)

A more detailed breakdown of quantities of waste is provided in Appendix 2.

Notwithstanding government policies on net inward migration, increasing the housing stock and growing the island's GDP, the WDA and the States have adopted zero waste growth in the BPEO evaluations. The Plan reflects this approach in setting out the quantities of waste for disposal, recovery or other waste management.

It should however be noted that the overall figures above represent a significant reduction compared to the figures included in the previous Waste Management Plan. This is largely down to a significant reduction in inert waste, although minor reductions in Household and non-inert commercial waste have also been experienced. The large reduction in inert waste represents variable activity within the construction industry. A shift to increased reuse and recycling of inert waste on construction sites is likely to have contributed the reduction in inert waste; however tonnages are not currently recorded.

3.2 Methods to be employed for the management of waste

Under section 31(3)(b) of the Environmental Pollution (Guernsey) Law, 2004 (the 2004 Law), the Waste Management Plan is required to identify the methods to be employed

for the recovery or disposal of waste identified in section 3.1 above. Facilities for recovery as well as for final disposal have been identified.

3.2.1 <u>Existing Facilities</u>

The table below details existing key infrastructure in Guernsey for the management of solid waste, using 2016 data in the tonnage column. These sites are operated, where appropriate, under licences issued by the Director of Environmental Health and Pollution Regulation (the Director):

DESCRIPTION	LOCATION	OPERATOR	TONNES
	(WDA SITES ONLY)		PER ANNUM
MRF (Commercial)	Fontaine Vinery	WDA	c. 4,000
MRF (Commercial)		Private	c. 21,000 ⁵
MRF (Dry Recyclables)	Fontaine Vinery	WDA	c. 2,500
MRF (Dry Recyclables)		Private	c. 9,000
Windrow Composting	Mont Cuet	WDA	c. 11,500
Civic Amenity Site	Mont Cuet	WDA	c. 1,000
Household Waste Recycling Facility (Temporary)	Longue Hougue	WDA	c. 2,000
Carcass Incinerator		States of Guernsey	c. 300
Healthcare Waste Incinerator		States of Guernsey	c. 600
Inert Waste	Longue Hougue	WDA	c. 81,000
Inert Recycling		Private	c. 13,000
Residual Landfill (Waste)	Mont Cuet	WDA	c. 27,000
Residual Landfill (Site Prep)	Mont Cuet	WDA	c. 43,000
Metal Recycling (including End-of-Life Vehicles (ELVs)		Private	c. 7,000
Specially Controlled Waste – On-island Disposal	Mont Cuet	WDA	c. 700
Specially Controlled Waste – Storage and Export for		WDA, Private	c. 1,600
Recovery			
Specially Controlled Waste –		WDA,	Up to a
Storage and Export for Disposal		Private	maximum of 136 ⁶)

⁵ Assumes Private facility is operating to capacity for permitted quantities of waste

⁶ Tonnages are specified in the Duly Reasoned Request (DRR), which is required under Article 11 of the Basel Convention and Article 41 of Regulation (ED) No. 1013/2006 in order for Guernsey to export specially controlled waste to the UK for disposal.

In addition to the above, there are a number of smaller operations that manage waste material prior to being recycled or reused.

3.2.2 Existing Supporting Facilities and Services

In addition to the above facilities, the WDA also manages an interim dry recyclables kerbside collection scheme, and provides bring banks for the collection of further dry recyclables and a public drop off facility for green waste at Chouet Headland.

3.2.3 <u>Future Facilities</u>

Based on current fill rates, and to enable windrow composting of green waste and the disposal of specially controlled waste to continue at Mont Cuet for the medium to long term, it is recognised that the disposal of residual waste at Mont Cuet is likely to cease to be a viable option beyond the end of 2018. Mont Cuet is also the last site licensed under the 2004 Law for the on-island disposal of specially controlled wastes.

The Solid Waste Strategy approved by the States (Billet d'État IV 2012) focuses on ensuring that waste is dealt with at the highest level possible in the Waste Hierarchy. This is to be achieved by minimising waste, increasing recycling and exporting residual waste for recovery.

DESCRIPTION	LOCATION	OPERATOR	TONNES
	(WDA SITES ONLY)		PER ANNUM
MRF (Commercial)		Private	ТВС
MRF (Optional)	Longue Hougue	WDA	ТВС
MRF (Dry Recyclables)		Private	c. 12,000
Windrow Composting Facility	Mont Cuet	WDA	c. 12,000
(with public drop-off area)			
Animal Carcass Incinerator		States of	c. 400
		Guernsey	
Clinical Waste Incinerator (or		States of	c. 650
alternative off-island facility)		Guernsey	
Waste Transfer Station to:	Longue Hougue	WDA	
1. Process residual waste to			
produce RDF for export;			c. 26,000
2. Process food waste for			
export; and			c. 4,000
3. Prepare glass bottles for			
export			c. 2,500

To support this strategy, the following facilities are required:

Residual Landfill (including on-island disposal of Specially Controlled Waste)	Mont Cuet	WDA	c. 2,000
Household Waste Recycling Centre (HWRC)	Longue Hougue	WDA	c. 4,000
Inert Waste Land Reclamation/Infill Site	Short Term – Longue Hougue, Medium Term – TBC ⁷ Long Term – TBC ⁸ .	WDA	c. 100,000 ⁹
Inert Waste Recycling		WDA/Private	c. 56,000 ¹⁰
Metal Recycling (including End-of-Life Vehicles (ELVs)		Private	c. 8,000
Specially Controlled Waste – Storage and Export for Recovery	Longue Hougue/Other	WDA/Private	c. 1,600
Specially Controlled Waste – Storage and Export for Disposal	Longue Hougue/Other	WDA/Private	Up to a maximum of 136 (as specified within the DRR)

3.2.4 Associated Future Facilities and Services

In addition to the above facilities, the solid waste strategy is reliant on:

- kerbside recycling (for dry recyclables and food waste);
- a rationalised bring bank network;
- recycling on-the-go litter bins;
- a Repair and Reuse service (delivered through the HWRC);
- export contracts for RDF, pre-processed food waste and other recyclables;
- site Waste Management Plans for individual developments (as defined in the IDP), administered by the Development & Planning Authority;
- education and training programmes;
- data collection and analysis.

3.2.5 <u>Waste Flow Modelling Assumptions</u>

Appendix 3 shows the waste flow model based on the 2016 waste arisings and 2015 waste composition analysis. Predicted tonnages assume the first full year

⁷ Subject to planning approval and the further approval of a full business case for a recommended site.

⁸ Subject to further review of options and subsequent States approval.

⁹The quantity of inert waste received for land reclamation fluctuates considerably.

¹⁰ Includes material previous used for Site Preparation at the residual landfill site.

of operation of new services and facilities required to deliver the waste strategy approved in 2012 will be 2019. A number of assumptions have been made in developing the model:

- Linear increases in recycling to achieve the 70% recycling target for household waste by the end of 2030. No step changes resulting from the introduction of new services/charges/legislation have been factored into increases in recycling performance;
- Waste wood that is currently shredded and mixed with waste soil/inert fines for use as cover material at Mont Cuet Landfill Site will return to the residual waste stream, as there will no longer be a requirement for this material. The soil/inert fines will be required to meet the waste acceptance criteria for the current WDA inert waste recovery/disposal site if alternative routes are not available;
- Alderney waste will continue to be received in Guernsey, and that the tonnages remain constant as Guernsey does not have influence over Alderney in terms of waste and recycling collections. Alderney Waste is assumed to have the same composition as Guernsey waste;
- An initial capture rate of 36% is assumed for food waste, increasing to 60% by the end of 2030. Assumed improvements in other recycling material capture rates are detailed against each material category;
- Litter is excluded from recycling rate calculations, as per revised UK methodology;
- Larger quantities of contaminated soil should be remediated in situ, or on site, with encapsulation on site if necessary. Only small quantities of such waste will be accepted at the specially controlled waste cell at Mont Cuet Landfill Site in order to preserve this valuable void space.
- Some Site Preparation materials/cover (soil, hardcore, and waste tarmac) will continue to be required at sites operated by the WDA. Remaining material will be directed to other engineering/building projects or will be required to meet the Waste Acceptance Criteria at the current WDA inert waste recovery/disposal site.
- Fines from the production of 'Fragmentiser' Waste (from Scrap Metal Processing) will still be used as cover material for the specially controlled waste cell at Mont Cuet Landfill Site. The remainder of this material will be exported for recycling/recovery.
- Tonnages for waste wood are based on historical data from waste audits and information provided by the private sector. With the introduction of Waste Management Licences in 2010, the practice of burning at specific sites was ended. It was expected that this wood would return to the residual waste stream; however evidence shows this not to be the case. Some wood has subsequently been used as blended cover material (see second bullet point above), but this use is not sustainable. From discussions with the industry, it is assumed that the remaining waste

wood is being burnt in small quantities privately across the island, or is exported for recovery within baled RDF produced by the private sector.

 <u>Waste Derived Material - 6,000 tonnes</u> Approximately 6,000 tonnes per year of waste derived material will be spread on land after treatment. This material results from the processing of green waste. The ongoing long term viability of this process and the long term capacity of the island's soils to take up these additional outputs, without adverse impacts to the land and water resources is unknown. The WDA has assumed that this waste derived material will meet quality standards and would be applied to the land in line with nutrient management plans where appropriate.

3.3 Estimated Financial Costs

Under section 31(3)(c) of the 2004 Law, the Waste Management Plan is required to identify the estimated financial costs of the management of waste by the methods identified in 3.2.

The costs detailed below are in relation to waste disposal and other waste management operations provided, managed, arranged or funded by or on behalf of the WDA. All private facilities detailed in sections 3.2.1 and 3.2.3 above will have a set gate fee or similar charging system to recover the costs of providing and operating such facilities.

3.3.1 Existing Operating Costs

It currently costs in the order of £6 million per annum to provide and operate the States owned key infrastructure and services for the management and disposal of solid waste (including recycling activities).

3.3.2 Future Operating Costs

The WDA estimates future costs for operating waste management facilities and services, based on a 20 year strategy, to be approximately £13 million per annum.

3.4 Recovery of the financial costs

Under section 31(3)(d) of the 2004 Law, the Waste Management Plan is required to outline arrangements for recovery of the estimated costs identified in 3.3 above.

3.4.1 Existing Cost Recovery Policies

Costs at public waste management sites managed by the WDA are recovered by way of gate fees applied at the receiving facilities. Gate Fees are set annually by Regulations, and are based on the tonnage and type of waste being deposited, recovered or otherwise managed. The gate fees have been set by the WDA to encourage segregation of inert material and the segregation of materials for recycling. Contamination rates are applied at Mont Cuet for loads containing material that could have been segregated.

The income received from the gate fees at Mont Cuet and Longue Hougue covers the running costs of the two sites, along with the cost of running WDA managed recycling and segregation facilities.

It is noted that a proportion of the gate fees were used to cover the costs of previous solid waste strategy investigations and are currently being used by the WDA in implementing the solid waste strategy.

3.4.2 Future Cost Recovery Policies

As outlined in Article 1 of Billet d'État II 2014 (paragraph 31.16) and in the resolutions on Article XIII of Billet d'État No. XXIV of 2017, the following charges are proposed for domestic waste:

- The Douzaines will make a direct charge to households for the costs of collections and transfer of waste, recyclables and food waste to licensed facilities based on a fixed charge per household. This is on the basis that the collection service represents a fixed cost regardless of how much waste is placed out by each household.
- The WDA will directly charge households to cover the costs of processing the materials after collection and to pay costs of all other public waste management services and initiatives provided, arranged or funded by the WDA (i.e. the States), and made available to households and the commercial sector. This charge will comprise:
 - A charge per bag (pay-as-you-throw)
 - An annual fixed charge per household.

As outlined in Article I of Billet d'État II of 2014 (paragraph 32.2), commercial waste delivered to sites provided, operated, managed, arranged or funded by or on behalf of the WDA will be charged a gate fee at a per tonne per load rate to cover the cost of providing the service. Gate fees at the different facilities may be set at differential rates to encourage businesses to deal with their waste through methods such as re-use and recycling which are higher up the Waste Hierarchy than recovery and disposal.

As outlined in resolution 1 following Article X of Billet d'État XXVI of 2014, businesses producing waste of a similar nature or composition and of a similar or lower volume to that produced by households may have the opportunity to

opt into the parochial waste collection and transfer service for black bag waste, recyclables and food waste, such businesses to be accepted by the Douzaines at their discretion, subject to available capacity within the collection services provided.

3.5 Public waste management sites

Under section 31(3)(e) of the 2004 Law, the Waste Management Plan is required to identify the sites or facilities provided, managed, arranged, operated or funded by or on behalf of the WDA where such recovery, disposal or other waste management operations are to take place ("public waste management sites").

Section 32(1) and (2) of the 2004 Law states that it is the duty of the WDA to make reasonable provision for the reception and recovery or disposal of waste at one or more public waste management sites (see Appendix 1) but that it need not make provision for facilities other than in respect of the public waste management sites identified in the current Waste Management Plan.

3.6 Existing Public Waste Management Sites

The following are existing WDA public waste management sites that are managed by the WDA or via arrangements with the private sector:

Civic Amenity Site (Mont Cuet)

A Civic Amenity Site is located at the entrance compound where the public can drop-off household waste (including black bag waste and bulky waste) and certain recyclable materials.

Household Waste Recycling Facility (Longue Hougue)

A temporary Household Waste Recycling facility is provided at Longue Hougue where the public can deposit potentially recyclable or reusable household waste.

Green Waste Processing Site (Mont Cuet)

Green waste processing, involving the composting of green waste using windrows, is currently undertaken at Mont Cuet Landfill Site, with public dropoff of green waste at the nearby Chouet Green Waste Site. Soil conditioner produced by composting green waste is publicly available at the Chouet Green Waste Site.

Inert Waste Disposal Site (Longue Hougue)

Longue Hougue is a marine reclamation site. Only inert waste is accepted at this site as the material has direct contact with the marine environment.

Materials Recovery Facility (MRF) (Fontaine Vinery)

A facility is provided at Fontaine Vinery for the processing of dry recyclates collected from bring banks, and for the segregation of mixed commercial waste (excluding black bag waste) delivered directly to the facility.

Residual Landfill Site (Mont Cuet)

Mont Cuet Landfill Site is the only site on Guernsey in respect of which a licence is held under the Law (licensed site) for the disposal of mixed household and commercial residual waste. Licensed operations include the discharge of leachate via the leachate treatment plant and landfill gas control measures.

Specially Controlled Waste Disposal Site (Mont Cuet)

Mont Cuet is a licensed site for the disposal of certain specially controlled wastes.

Waste Oil Storage Site (North Side Oil Yard)

Waste mineral and vegetable oil will continue to be stored at the North Side Oil Yard prior to reuse on-island (e.g. as a biodiesel) or being exported for recovery.

3.7 Future Public Waste Management Sites

The following are WDA public waste management sites that will be managed by the WDA or via arrangements with the private sector following the implementation of the waste strategy:

Household Waste Recycling Centre (Longue Hougue)

A Household Waste Recycling Centre is to be opened at Longue Hougue Reclamation Site, incorporating a reuse service. This replaces the existing Civic Amenity Site at Mont Cuet Landfill Site and the temporary Household Waste Recycling Facility.

Green Waste Processing (Mont Cuet)

Green waste processing, involving the composting of green waste using windrows, will be undertaken on a capped area at Mont Cuet Landfill Site, with a public drop-off area for green waste also at this site. Soil conditioner produced by composting green waste will be publicly available from this site.

Inert Waste Disposal Site

Inert waste will continue to be accepted for land reclamation at Longue Hougue Land Reclamation Site in the short term; however this site is expected to be at full capacity in 2021.

Following completion of the current Longue Hougue Land Reclamation Site, further inert waste disposal is proposed at a new site, subject to completion and consideration of an Environmental Impact Assessment (EIA), and subject to obtaining the relevant planning permission and waste management licence.

The follow-on site will be one selected from short-listed options, as detailed in Article XIV of Billet d'Etat XXIV of 2017 and following further work directed by the States following the States debate. The short list was is based on identification and evaluation of the Best Practical Environmental Options (BPEO) for this particular waste stream. This process has also identified further options for the management of inert waste in the longer term, which will be reviewed and progressed as required in the future, subject to obtaining the necessary approvals and licences. The recycling and/or reuse of inert waste shall take precedence over recovery or disposal of inert waste.

Materials Recovery Facility (MRF) (Dry Recyclables)

A facility is required by the WDA for the segregation of co-mingled dry recyclates collected from kerbside collections from households and small businesses that are admitted into the kerbside scheme, and from a rationalised bring bank service. This is to be provided by the private sector on behalf of the WDA. Provision is also made for a MRF to be operated by the WDA should this be required.

Materials Recovery Facility (MRF) (Mixed Commercial Waste)

A MRF is required to sort mixed commercial waste for the recovery of inert and recyclable materials. Provision is also made for a MRF to be operated by the WDA should this be required.

Residual Landfill Site (Mont Cuet)

Although it is proposed that residual household and commercial waste, excluding specially controlled wastes, should be exported as RDF to an energy

recovery facility, there may be particular waste types requiring on-island disposal, or times when due to exceptional circumstances there is a need to dispose of residual wastes on-island.

As the last licensed landfill site, provision is maintained for such ad hoc wastes requiring disposal at Mont Cuet during the life of the approved Solid Waste Strategy.

Specially Controlled Waste Disposal Site (Mont Cuet)

Certain specially controlled wastes requiring disposal on-island will be landfilled in an engineered cell at Mont Cuet Landfill Site.

Specially Controlled Waste Storage (Longue Hougue)

Certain specially controlled wastes requiring recovery or disposal off-island will be stored in a specially engineered secure compound at Longue Hougue Reclamation Site.

Waste Oil Storage Site (North Side)

Waste mineral and vegetable oil will continue to be stored at the North Side Oil Yard prior to reuse on-island (e.g. as a biodiesel) or being exported for recovery.

Waste Transfer Station (Longue Hougue)

Residual household and commercial waste, excluding specially controlled wastes, will be received at the WDA Waste Transfer Station located at Longue Hougue Reclamation Site. It will then be exported for energy recovery after processing to produce a Refuse Derived Fuel (RDF). The Waste Transfer Station will also receive segregated food waste from both household and commercial sources for pre-processing prior to export for energy recovery at an anaerobic digestion (or similar) facility in the UK, and glass bottles and jars for bulking in advance of recycling.

4. POLICY IN RELATION TO STRATEGICALLY IMPORTANT STATES/WDA FACILITIES

Policy to be taken into account by the Director in making waste management licensing decisions in relation to private waste operations which may compete with the Waste Transfer Station.

Section 33(2) and (2A) of the 2004 Law require the Director to take into account this Waste Management Plan and consult with the WDA, the Constables of the Parishes and certain States Committees when considering an application for a licence, or for any variation of conditions of a licence, under the Law permitting the disposal of waste other than at a public waste management site or the carrying out of an operation which might divert waste from a public waste management site identified in this Part of the Waste Management Plan. Section 35(1) of the Law also requires the Director to attach to any licence permitting certain waste management operations all such conditions as appear to the Director to be necessary or expedient to ensure.....the sustainable management of waste in the longer term.

When consulted, section 33(3) of the 2004 Law clarifies that the WDA's representations to the Director are not confined to Section 15 of the 2004 Law (Grant or refusal of Applications), but may include the public interest in ensuring that waste is not without good reason diverted from public waste management sites. This applies to the States/WDA provided, operated and funded Waste Transfer Station (the States/WDA Waste Transfer Station).

The States policy is to impinge as little as possible on private waste operations whilst recognising that it is essential and in the public interest that the States/WDA Waste Transfer Station can remain available and economically viable in the long term to manage the waste identified in relation to those facilities in this Plan.

In a small jurisdiction such as Guernsey, given limited economies of scale and the relatively small quantities of waste to be managed, it may be in the public interest to restrict diversion of waste from the States/WDA Waste Transfer Station to private facilities, given the cost of providing public waste management facilities.

As detailed under section 31(3) of the 2004 Law, the Committee for the Environment & Infrastructure shall from time to time, following recommendations made to it by the Waste Disposal Authority, lay before the States a draft Waste Management Plan for consideration.

Should any of the necessary Local Planning Brief, planning permission, waste licence, business case or other approvals and consents not be adopted, approved or granted, so as to allow delivery of the various elements of the waste strategy as detailed in Section 2.2.1 above, the WDA will consider whether it needs to recommend to the Committee for the Environment & Infrastructure any changes to the Waste Management Plan to enable the management of waste produced on Guernsey, following the procedure under the 2004 Law.

Appendix 1 Extract from 'The Environmental Pollution (Guernsey) Law, 2004'

Waste Management Plans

31. (1) The Waste Disposal Authority shall from time to time make recommendations to the Committee for the Environment & Infrastructure in connection with the preparation by the Committee for the Environment & Infrastructure for consideration by the States of draft Waste Management Plans.

(2) In performing its duties under subsection (1) the Waste Disposal Authority shall consult –

- (a) the [Committee for the Environment & Infrastructure],
- (b) the [Committee for the Environment & Infrastructure],
- (c) the States [Committee for Economic Development],
- (d) the Douzaine of each of the Parishes of Guernsey,
- (e) the [Committee for Health and Social Care],
- (f) the Director, and
- (g) such other bodies or persons as it thinks fit.

(3) The Committee for the Environment & Infrastructure shall from time to time, following recommendations made to it by the Waste Disposal Authority, lay before the States a draft Waste Management Plan identifying –

- (a) the descriptions and quantities of waste for the recovery or disposal of which provision needs to be made during such period as may be specified,
- (b) the methods to be employed for its recovery or disposal,
- (c) the estimated financial costs of such recovery or disposal,
- (d) arrangements for the recovery of those costs, and

(e) the sites or facilities provided, managed, arranged, operated or funded by or on behalf of the Waste Disposal Authority where, subject to subsection (4), such recovery, disposal or other waste management operations are to take place ("public waste management sites"),

and when such a draft Plan has been approved, with or without modification, by the States it shall become the current "Waste Management Plan" for the purposes of this Law.

(4) For avoidance of doubt the designation of a public waste management site by a Waste Management Plan –

- (a) does not override the terms of any Development Plan, Subject Plan or Local Planning Brief for the time being in force under the Land Planning and Development (Guernsey) Law, 2005, or avoid the need for a planning inquiry to be held where required under that Law as respects any amendment to such a Plan or Brief intended to enable the implementation of that designation, and
- (b) does not absolve the Waste Disposal Authority from obtaining and complying with the conditions of any licence required pursuant to this Law in respect of its operation of that site.

Licensed waste operations

Public waste management sites.

32. (1) Subject to the following provisions of this section, it is the duty of the Waste Disposal Authority to make such arrangements as may be necessary for the reasonable provision of facilities for the reception and recovery or disposal of waste at one or more public waste management sites in accordance with the Waste Management Plan.

(2) For the avoidance of doubt, in discharging its duty under subsection (1) the Waste Disposal Authority need not make arrangements for the provision of facilities for the reception and recovery or disposal of waste other than in respect of the public waste management sites identified in the current Waste Management Plan.

(3) In discharging its duty under subsection (1) the Waste Disposal Authority is entitled –

(a) to reserve particular sites for –

- (i) particular descriptions of waste, or
- (ii) use by particular categories of persons,
- (b) to specify limited times at which, and other conditions subject to which, waste or waste of any particular description will be accepted at any site or any particular site, and
- (c) to prescribe by regulations the charges or rates of charge and the basis on which charges must be paid as a precondition of its acceptance of waste, or of waste of any particular description,

and need not accept waste in respect of which all such requirements are not fulfilled.

(4) Regulations of the Waste Disposal Authority under subsection (3)(c) may for the avoidance of doubt and without prejudice to the generality of that subsection –

- (a) prescribe charges with a view to recovering the capital, operational and administrative costs reasonably incurred by the States in providing facilities and services at all public waste management sites, and
- (b) apply a discount or surcharge to a charge calculated on the basis of paragraph (a), based on the position in the waste hierarchy of

operations carried on at the site, with the highest charge being in respect of sites where disposal is carried on.

(5) In this section and in section 32A "waste hierarchy" means applying the following waste hierarchy as a priority order –

- (a) prevention,
- (b) preparing for re-use,
- (c) recycling,
- (d) other recovery, including energy recovery, and
- (e) disposal.

(6) In the exercise of its powers under subsections (3) and (4), and generally in its management of public waste management sites, the Waste Disposal Authority must –

- (a) have regard to the current Waste Management Plan,
- (b) comply with the conditions of any licence under this Law to which the operation is subject, and
- (c) comply with all other obligations imposed on it by or under this Law and any other enactment.

Private waste management on land.

- 33. (1) Without prejudice to the generality of section 22(3)(a), an Ordinance making such provision as is mentioned in section 13 as respects the disposal of waste (or, whilst such an Ordinance is in force, any other Ordinance made under this Law) may
 - (a) prohibit the disposal of any waste, or of any description or type of waste, otherwise than at a public waste management site,
 - (b) preclude the Director from granting licences permitting the disposal of any waste, or of any description or type of waste
 - (i) except at a public waste management site,

- (ii) except with the consent of, and in accordance with any requirements made by, the Waste Disposal Authority,
- (iii) in excess of such volumes as may be specified in the Ordinance, or
- (iv) at such locations, or other than at such locations, as may be specified or described in the Ordinance.

(2) In considering an application for a licence, or the variation of the conditions of a licence, under this Law permitting –

- (a) the disposal of waste on land otherwise than at a public waste management site, or
- (b) the carrying out of an operation which might divert waste from a public waste management site identified under that Part of the Waste Management Plan detailing policy in relation to strategically important Waste Disposal Authority facilities,

the Director shall comply with the requirements in subsection (2A).

- (2A) The requirements referred to in subsection (2) are that the Director
 - (a) shall not grant the application in contravention of subsection (1),
 - (b) shall take into account, in addition to the matters set out in section 15, the current Waste Management Plan, and
 - (c) shall consult, and have regard to any representations made by
 - (i) the Waste Disposal Authority,
 - (ii) the Constables of the Parish concerned,
 - (iii) the Committee for the Environment & Infrastructure,
 - (iv) the Committee for Health & Social Care,
 - (v) the Committee, and
 - (vi) the Committee for the Environment & Infrastructure,

provided that compliance with this subsection does not modify the effect of section 23.

(3) For the avoidance of doubt, the representations of the Waste Disposal Authority to which the Director is obliged by subsection (2A)(c)(i) to have regard are not confined to the matters set out in section 15, but include the public interest in ensuring that waste is not without good reason diverted from public waste management sites.

Appendix 2 Waste data based on 2016 tonnages

The following information is based on 2016 waste arisings data (tonnes) provided by the WDA.

HOUSEHOLD		
Residual Waste	13,1	. 90
 'Black bag' waste 	11,312	
 CA Site/Bulk Refuse 	1,878	
Recycling	12,0)50
 - 'Dry' recyclables 	6,769	
 - 'Green' waste 	3,862	
 Other Household Recycling 	1,419	
TOTAL HOUSEHOLD	<u>25,</u>	<u>240</u>
COMMERCIAL		
Inert Waste	81,.	312
 Inert Builders Waste 	81,312	
Inert Recycling/Recovery	59,	185
 Inert Recycling 	12,936	
 Site Preparation Materials (Recovery) 	46,249	
• Cover 32,933		
 Commercial MRF Output 7,360 		
 Hard-core/Tarmac 5,956 		
Residual Waste	-	860
 Compacted 	4,863	
 Residual Commercial 	9,177	
 Fragmentiser Waste (disposal) 	142	
 Fragmentiser Waste (cover material) 	1,019	
 Specially Controlled Wastes 	427	
 Waste Wood 	7,636	
 Healthcare Waste 	588	
 Abattoir Waste 	293	
 Exported as Refuse Derived Fuel 	1,715	
Recycling	18,5	599
 'Dry' recyclables 	4,790	
 - 'Green' waste 	7,125	
 Recyclables (metal, pallets, WEEE) 	5,345	
 Specially Controlled Waste 	1,116	
(off-island recovery)		
 Fragmentiser Waste (recovery) 	223	
TOTAL COMMERCIAL	<u>184,</u>	
TOTAL WASTE ARISINGS	<u>210,</u>	<u>196</u>

The waste categories detailed above are currently processed as follows:

DISPOSAL AT MONT CUET ¹¹	TONNES
'Black bag' waste	11,312
CA Site/Bulk Refuse	1,878
Compacted (Commercial)	4,863
Residual Commercial	9,177
Fragmentiser Waste (on-island disposal)	47
Fragmentiser Waste (cover material)	1,019
Specially Controlled Wastes (on-island) ¹²	411
SUB-TOTAL	28,707
DISPOSAL ELSEWHERE	TONNES
Fragmentiser Waste (off-island disposal)	96
Specially Controlled Waste (off-island disposal) ¹²	16
SUB-TOTAL	112
	ΤΟΝΝΓΟ
LAND RECLAMATION AT LONGUE HOUGUE	TONNES
Inert Builders Waste	81,312
SUB-TOTAL	81,312
RECYCLED/RECOVERED WASTE	TONNES
'Dry' recyclables (Household)	6,769
'Green' waste (Household)	
	3,862
CA Site/Bulk Refuse	3,862 1,419
CA Site/Bulk Refuse	1,419
CA Site/Bulk Refuse Inert Recycling	1,419 12,936
CA Site/Bulk Refuse Inert Recycling 'Dry' recyclables (Commercial)	1,419 12,936 4,790
CA Site/Bulk Refuse Inert Recycling 'Dry' recyclables (Commercial) 'Green' waste (Commercial)	1,419 12,936 4,790 7,125
CA Site/Bulk Refuse Inert Recycling 'Dry' recyclables (Commercial) 'Green' waste (Commercial) Recyclables (metal, pallets, WEEE)	1,419 12,936 4,790 7,125 5,345
CA Site/Bulk Refuse Inert Recycling 'Dry' recyclables (Commercial) 'Green' waste (Commercial) Recyclables (metal, pallets, WEEE) Specially Controlled Waste (off-island recovery)	1,419 12,936 4,790 7,125 5,345 1,116
CA Site/Bulk Refuse Inert Recycling 'Dry' recyclables (Commercial) 'Green' waste (Commercial) Recyclables (metal, pallets, WEEE) Specially Controlled Waste (off-island recovery) Fragmentiser Waste (off-island recovery)	1,419 12,936 4,790 7,125 5,345 1,116 223
CA Site/Bulk Refuse Inert Recycling 'Dry' recyclables (Commercial) 'Green' waste (Commercial) Recyclables (metal, pallets, WEEE) Specially Controlled Waste (off-island recovery) Fragmentiser Waste (off-island recovery) Export of RDF (off-island recovery)	1,419 12,936 4,790 7,125 5,345 1,116 223 1,715
CA Site/Bulk Refuse Inert Recycling 'Dry' recyclables (Commercial) 'Green' waste (Commercial) Recyclables (metal, pallets, WEEE) Specially Controlled Waste (off-island recovery) Fragmentiser Waste (off-island recovery) Export of RDF (off-island recovery) SUB-TOTAL	1,419 12,936 4,790 7,125 5,345 1,116 223 1,715 45,300
CA Site/Bulk Refuse Inert Recycling 'Dry' recyclables (Commercial) 'Green' waste (Commercial) Recyclables (metal, pallets, WEEE) Specially Controlled Waste (off-island recovery) Fragmentiser Waste (off-island recovery) Export of RDF (off-island recovery) SUB-TOTAL ON-ISLAND TREATMENT	1,419 12,936 4,790 7,125 5,345 1,116 223 1,715 45,300
CA Site/Bulk Refuse Inert Recycling 'Dry' recyclables (Commercial) 'Green' waste (Commercial) Recyclables (metal, pallets, WEEE) Specially Controlled Waste (off-island recovery) Fragmentiser Waste (off-island recovery) Export of RDF (off-island recovery) SUB-TOTAL ON-ISLAND TREATMENT Waste Wood	1,419 12,936 4,790 7,125 5,345 1,116 223 1,715 45,300 TONNES 7,636

TOTAL

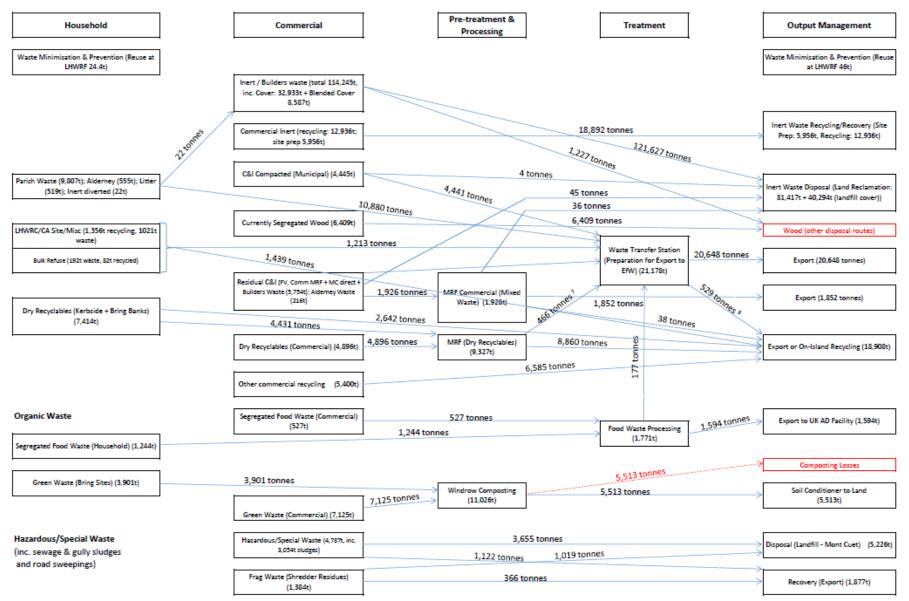
^{163,948}

¹¹ Excludes site preparation materials

¹² Does not include bottom ash or Air Pollution Control residues generated by the clinical waste and carcass incinerators as raw data is provided for these waste streams.

Appendix 3 Waste Flow Model

WASTE FLOW MODEL - PREDICTED TONNAGES ON COMMISSIONING OF THE WASTE TRANSFER STATION, BASED ON 2016 DATA AND 2015 WASTE COMPOSITION ANALYSIS.



Appendix 4 Description of Facilities and Processes

Anaerobic Digestion

The processing of organic waste in the absence of oxygen in tanks resulting in the capture of biogas which is used to generate energy and a nutrient rich digestate that can be applied as a fertiliser to land.

Brink Banks

Bring banks and receptacles provided for the collection of recyclables/ recyclates.

Household Waste Recycling Centre (HWRC) (or Civic Amenity Site (CA Site))

A household waste recycling centre (HWRC) is a facility where the public can deposit household waste and recyclables. HWRCs are typically run by the local Government in a given area. Collection points for recyclable waste such as green waste, metals, glass and other waste types are available.

Kerbside Recycling

A service provided to collect recyclables and source segregated food waste put out in a prescribed manner and collected from the kerbside.

Materials Recovery Facility (MRF)

A Materials Recovery Facility houses operations that process incoming waste so that it may be recycled and/or directed to an appropriate treatment/disposal facility. Separation is achieved by a combination of manual and automated processes.

Refuse Derived Fuel

Residual waste that has been processed in preparation for transport to an energy recovery facility under European Waste Catalogue code 19 12 10: combustible waste (Refuse Derived Fuel (RDF)).

Repair and Reuse Centre

Facilitates the transaction and redistribution of unwanted, yet perfectly usable, materials and equipment from one entity to another.

Waste Transfer Station

The Waste Transfer Station will accept residual waste from both household and commercial sources. It will then be prepared for export as RDF to an off-island energy recovery facility. The Waste Transfer Station may also receive other wastes for preprocessing in advance of distribution to an appropriate recycling, recovery, or disposal facility. In the case of the facility at Longue Hougue, segregated food waste will be received and processed into an "AD Soup" to enable transportation to at glass recycling facility.

Windrow Composting

Windrowing is the composting of organic matter by piling in long rows (windrows), which are turned regularly to improve porosity and oxygen content once the required temperature is achieved (typically 65°C). This method is currently used to process both household and commercial green waste, producing a soil conditioner which can be applied to the land. It is not suitable for food waste.