

LA GIGOULANDE QUARRY, INERT WASTE RECYCLING FACILITY

Waste Management Licence Application

Working Plan

Prepared for: Granite Products (C.I.) Limited

SLR Ref: 416.07293.00002
Version No: 1
June 2020



BASIS OF REPORT

This document has been prepared by SLR Consulting Limited with reasonable skill, care and diligence, and taking account of the manpower, timescales and resources devoted to it by agreement with Granite Products (C.I.) Limited (the Client) as part or all of the services it has been appointed by the Client to carry out. It is subject to the terms and conditions of that appointment.

SLR shall not be liable for the use of or reliance on any information, advice, recommendations and opinions in this document for any purpose by any person other than the Client. Reliance may be granted to a third party only in the event that SLR and the third party have executed a reliance agreement or collateral warranty.

Information reported herein may be based on the interpretation of public domain data collected by SLR, and/or information supplied by the Client and/or its other advisors and associates. These data have been accepted in good faith as being accurate and valid.

The copyright and intellectual property in all drawings, reports, specifications, bills of quantities, calculations and other information set out in this report remain vested in SLR unless the terms of appointment state otherwise.

This document may contain information of a specialised and/or highly technical nature and the Client is advised to seek clarification on any elements which may be unclear to it.

Information, advice, recommendations and opinions in this document should only be relied upon in the context of the whole document and any documents referenced explicitly herein and should then only be used within the context of the appointment.

CONTENTS

1.0	INTRODUCTION	1
1.1	Proposed Activities	1
1.2	Application Area.....	1
2.0	SITE SETTING	1
2.1	Site Setting and Receptors	1
2.1.1	Site Setting.....	1
2.1.2	Identified Receptors	2
2.1.3	Geology, Hydrology and Hydrogeology.....	3
2.1.4	Ecology.....	4
2.1.5	Culture and Heritage	4
3.0	GENERAL CONSIDERATIONS.....	4
3.1	General Management	4
3.2	Waste Types and Quantities	5
3.2.1	Waste Types – Recycling Facility.....	5
3.2.2	Waste Quantities	6
3.3	Hours of Operation	7
3.4	Commencement of Activities.....	7
3.5	Manning and Management Plan	7
3.5.1	Environmental Management System	7
3.5.2	Management Structure.....	7
3.5.3	Staff Training and Development Systems	7
3.5.4	Staff Numbers and Job Titles	8
3.6	Emergency Procedures	8
3.7	Maximum Duration of Waste Storage	8
3.8	Financial Security	8
4.0	SITE INFRASTRUCTURE.....	8
4.1	Site Access	9
4.1.1	Control Procedures for Persons and Vehicles Arriving and Departing From Site	9
4.2	Site Security	9
4.3	Wheel Cleaning.....	9
4.4	Noticeboards and Signs.....	10
4.5	Internal Roads.....	10

4.6	Fuel Tanks and Bunding	10
4.7	Weighing and Measuring of Loads.....	10
4.8	Secure Compound.....	11
4.9	Hardstanding/Parking	11
4.10	Laboratory	11
4.11	Drainage	11
4.11.1	Surface Water	11
4.11.2	Haul Road Drainage.....	12
4.12	Bays and Bins.....	12
4.13	Site Office	12
5.0	SITE PREPARATION	12
5.1	Surface Water Management.....	12
5.2	Installation of Monitoring Facilities.....	12
5.2.1	Surface Water	12
6.0	WASTE RECEPTION	13
6.1	Checking Loads	13
6.2	Recording Loads.....	13
6.3	Rejection of Loads.....	13
6.4	Sampling and Analysis.....	13
6.5	Testing of Wastes Handling, Segregation and Storage.....	13
7.0	SITE OPERATIONS	14
7.1	Plant and Machinery	14
7.2	Compatible Wastes	14
7.3	Special Waste Management Procedures	14
7.4	Residues.....	15
7.5	Leakages or Spills	15
7.6	Tidiness	15
7.7	Process.....	15
8.0	POLLUTION CONTROLS	16
8.1	Dust.....	16
8.2	Noise/Vibration.....	16
8.3	Odour.....	16
8.4	Vermin/Insect/Bird Control.....	17

8.5	Litter.....	17
9.0	MONITORING.....	17
9.1	Surface Water	18
9.2	Dust, Noise and Vibration	18
9.3	Odour.....	18
10.0	RECORDS.....	18
10.1	Wastes Received and Removed.....	18
10.2	Rejected Wastes.....	19
10.3	Site Diary	19
10.4	Monitoring Data	19
10.5	Waste Analysis.....	19
10.6	Site Inspections	19
11.0	SITE COMPLETION	19
11.1	Site clearance	19

DOCUMENT REFERENCES

TABLES

Table 1 Immediate Surrounding Land Uses	2
Table 2 Sensitive Receptors within 500m of the Site.....	2
Table 3 List of Wastes – Recycling Facility.....	5

REFERENCED DRAWINGS

Drawing 001	Site Location
Drawing 002	Environmental Site Setting
Drawing 003	Site Layout

1.0 INTRODUCTION

SLR Consulting Limited (SLR) has been instructed by Granite Products (C.I.) Limited (Granite Products) to prepare a Waste Management Licence application for La Gigoulande Quarry, Jersey to authorise the operation of an inert waste recycling facility.

The Working Plan provides a detailed overview of the proposed operations on site, the infrastructure and wastes to be accepted, risks and safety measures, timescales and management procedures put in place to ensure that the operations do not negatively impact the surrounding environment or human health.

This document has been completed in association with the States of Jersey guidance 'Guidance Notes for Applying for a Waste Management Licence' May 2017 and 'Guidance Notes on the New Waste Management Licensing System' January 2007.

The 2007 guidance lays out what is required of a Working Plan and states that it should correspond where possible to the corresponding Licence Conditions. This document follows the structure suggested in Appendix 4 of the 2007 guidance and includes all suggested topics where relevant.

1.1 Proposed Activities

The proposal is for the establishment of an inert waste recycling facility. The recycling facility will comprise mobile plant including crushers and screens together with storage areas for feedstocks and processed materials. Granite Products' intention is to recycle as much of the material received at the site as possible to produce soils, soil substitutes and secondary aggregates with only residual materials that cannot be recycled sent to landfill.

Stockpiles of imported waste, recycled products and residual materials will be created in the recycling area with a maximum height of 4m.

A maximum of 200,000 tonnes per annum of inert waste materials will be imported to the site for processing. There is a planning obligation to recycle 60% of this material, leaving an estimated maximum of 80,000 tonnes per annum of inert waste to be sent for disposal.

1.2 Application Area

The area that will be occupied by the proposed waste management activities (hereinafter referred to as 'the site') is situated at La Gigoulande Quarry in St Peter's Valley, Jersey. La Gigoulande Quarry is an operational hard rock quarry in St Peter's Valley which is surrounded by a mosaic of woodland, residential and agricultural land. The application area is illustrated in Drawing 003. Authorised waste management activities will only be undertaken within the application area. The application area comprises an area for the inert waste recycling facility, the proposed access route from the main road and the site reception area comprising weighbridges and weighbridge office.

2.0 SITE SETTING

2.1 Site Setting and Receptors

2.1.1 Site Setting

La Gigoulande Quarry is located 370m north of the town of L'Aleval, 495m south of Les Potirons, 500m west of La Pierre des Baissières and 780m east of Elysée in St. Mary, Jersey. The site is centred on 70000mN, 37400mE Jersey Transverse Mercator (JTM).

The surrounding land generally consists of agricultural fields with large corridors of woodland immediately to the west. Small villages and towns dot the landscape along with farm buildings. Access to the site is gained via La Rue de la Vallée (B26) which frames the northern boundary of the site.

The location of the site and its environmental setting are illustrated on Drawings 001 and 002.

A summary of the site's immediate surrounding land uses is presented in Table 1 below.

Table 1 Immediate Surrounding Land Uses

Boundary	Description
North	Existing Quarry Operations (including mineral processing and readymix concrete production), Residential Property, Church, Woodland, Local Road Network.
East	Existing Quarry Operations
South	Residential Property, Woodland, Agricultural Land.
West	Existing Quarry Operations (including concrete block production), Residential Property, Woodland, Local Road Network.

2.1.2 Identified Receptors

All potentially sensitive receptors within a 500m radius of the site are summarised in Table 2.

Table 2 Sensitive Receptors within 500m of the Site

Receptor	Type of Receptor	Direction	Approximate Distance from the Site Boundary in metres at the nearest location
Woodland	Open/Woodland	N, E, S, W	10m
La Gigoulande Quarry	Industrial	N, E, W	Adjacent
Local Road Network including La Rue de la Valle, La Rue Bechervaise and Mont Remon	Local Road Network	N, E, S, W	Adjacent
Jersey Building Supplies (Land owned by Granite Products C.I. Limited)	Industrial	N	Adjacent
FDJ Construction Limited (Land owned by Granite Products C.I. Limited)	Industrial	N	Adjacent
Open Land	Agricultural/Grassland	N, E, S, W	30
La Gigoulande Mill Stream	Surface Water	N, NW, W	40
Les Perquages Cottage	Residential	SW	230
Les Chasses	Residential	NE	115
Church of Jesus Christ of Latter Day Saints	Ecclesiastical	NE	55
Residential Properties associated with La Rue de La Vallee B26	Residential	N, W	210
Agricultural Buildings	Agricultural	W, S, E	265

Receptor	Type of Receptor	Direction	Approximate Distance from the Site Boundary in metres at the nearest location
St Mary's Forge	Industrial	N	170
St Mary's Valley Stream	Surface Water	W, NW	170
Residential Properties associated with La Dimerie Road	Residential	NW	170
La Hague Reservoir	Surface Water	SW	380
Aristock	Commercial	W	460
Residential properties associated with La Cheve Rue	Residential	E, NE	320
La Tenue	Residential	NE	355
Greenhills Country Hotel and Restaurant	Commercial (with Residential Use)	S	370
Les Sapins	Residential	N	400
Les Potirons	Residential	N	495

2.1.3 Geology, Hydrology and Hydrogeology

Geology

British Geological Survey maps identify the geology in the vicinity of the site to comprise Quaternary loess overlying Ordovician coarse-grained granite. The loess and some depth of granite has been extracted during quarry operations on the site, as such, the recycling facility will be sited upon the granite.

Hydrology

The site is located within the catchment area of the La Gigoulande Mill Stream, approximately 10m to the south of the site access and proposed licence boundary at its closest. The stream runs from north east to south west in relation to the site boundary before flowing into St Peter's Valley approximately 60m west of the quarry in a southerly direction. Approximately 150m south west of the site, the stream flows into La Hague Reservoir. Water flows through the dam at the south of the reservoir and continues southwards. A tributary of La Gigoulande Mill Stream known as St Mary's Valley Stream is located approximately 50m west of the site. La Gigoulande Mill Stream terminates approximately 3.5km south south east of the site when it discharges into the sea at Beaumont.

Hydrogeology

The granite upon which the site lies is water bearing. It has a low primary permeability, but fractures present within the granite cause it to have a high secondary permeability.

The site and surrounding area lie in a Water Pollution Safeguard Area (WPSGA) for the protection of aquifers and watercourses.

2.1.4 Ecology

Designated Habitats

A review of the Government of Jersey's Natural Site Search website¹, Listed Buildings or Places Database² has not identified any Sites of Special Interest, Proposed Sites of Special Interest, Areas of Special Protection, Environmentally Sensitive Areas, Nature Reserves, Wildlife Corridors or Habitat Concentration Areas within 2km of the site.

2.1.5 Culture and Heritage

A review of the Listed Buildings and Places Database indicates that there are a number of designated Historic Environments within 2km of the site.

The closest of these is the Grade 3 Listed Le Chasses located approximately 115m from the site WML boundary.

3.0 GENERAL CONSIDERATIONS

3.1 General Management

Granite Products is part of the Brett Group of companies. The activities to be carried out at the La Gigoulande Inert Waste Recycling Facility will be managed and operated in accordance with the Brett Group Integrated Management System (IMS) known as QHEST (Quality, Health, Environment, Safety Together) which combines the requirements for quality, occupational health, environment and safety into one comprehensive set of procedures. The management system is certified to the following standards:

- BS EN ISO14001:2015, Environmental management systems;
- BS EN ISO9001:2015, Quality management systems;
- BS EN ISO45001:2018, Occupational Health and Safety Management Systems;
- QSRMC Quality and Product Conformity Regulations 2017 (EN 206-1); and
- BES 6001 Issue 3 Responsible Sourcing of Construction Products.

Furthermore, Granite Products has business level certification to ISO14001, ISO45001 and QSRMC standards.

The management system will therefore ensure that:

- The risks that the activities pose to the environment are identified;
- The measures that are required to minimise the risks are identified;
- The activities are managed in accordance with the management system;
- Performance against the management system is audited at regular intervals; and
- The Waste Management Licence is complied with.

A summary of the QHEST management system is enclosed in Section 4 of the application. These documents include:

- Introduction to the QHEST system;

1 <https://www.gov.je/citizen/Planning/Pages/NaturalSites.aspx>, Accessed in May 2020.

2 <https://www.gov.je/citizen/Planning/Pages/HistoricEnvironments.aspx>, Accessed in May 2020.

- Brett Group Procedures;
- Granite Products Procedures; and
- QHEST Guidance Notes.

The QHEST IMS is subject to continual review in response to significant changes to the activities, accidents or non-compliance. A copy of the QHEST IMS will be available for inspection on site.

The satisfactory control, operation and management of the site in accordance with the WML will be achieved by operating in accordance with the following procedure:

- JSY41 Control and Operation of the Recycling Facility.

3.2 Waste Types and Quantities

3.2.1 Waste Types – Recycling Facility

The recycling facility will accept only inert waste. Inert waste is waste that will not undergo any significant physical, chemical or biological transformation or reaction, or give rise to environmental pollution or harm to human health.

The inert wastes that will be accepted onto site for processing at the recycling facility are detailed in Table 3.

Table 3 List of Wastes – Recycling Facility

Exclusions - wastes having any of the following characteristics:	
<ul style="list-style-type: none"> • Consisting solely or mainly of dusts, powders or loose fibres • Hazardous wastes • Wastes in liquid form 	
Waste code	Description
01	Wastes resulting from exploration, mining and quarrying and physical treatment of minerals
01 01	Wastes from mineral excavation
01 01 02	Wastes from mineral non-metalliferous excavation
01 04	Wastes from physical and chemical processing of non-metalliferous minerals
01 04 08	Waste gravel and crushed rocks
01 04 09	Waste sands and clays
01 04 12	Waste tailings – limited to sediment removed from the on-site silt settlement lagoon
01 04 13	Waste from stone cutting and sawing
10	Wastes from thermal processes
10 11	Wastes from manufacture of glass and glass products
10 11 12	Clean glass

10 12	Wastes from manufacture of ceramic goods, bricks, tiles and construction products
10 12 08	Waste ceramics, bricks, tiles and construction products (after thermal processing)
10 13	Wastes from manufacture of cement, lime and plaster products and articles and products made from them
10 13 14	Waste concrete residues from manufacture of concrete products and reject concrete products
15	Waste packaging
15 01	Packaging
15 01 07	Clean glass only
17	Construction and demolition wastes
17 01	Concrete, bricks, tiles and ceramics
17 01 01	Concrete
17 01 02	Bricks
17 01 03	Tiles and ceramics
17 01 07	Mixtures of concrete, bricks, tiles and ceramics
17 02	Wood, glass and plastic
17 02 02	Clean glass only
17 05	Soil and stones
17 05 04	Soil and stones
19	Wastes from waste management facilities
19 12	Waste from the mechanical treatment of waste
19 12 05	Clean glass only
19 12 09	Minerals (for example sand, stones)
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions
20 01	Separately collected fractions
20 01 02	Clean glass only
20 02	Garden and park wastes
20 02 02	Soil and stones

3.2.2 Waste Quantities

The maximum quantities of waste that will be accepted at the site are 200,000 tonnes per annum, 28,000 tonnes per month and 1,260 tonnes per day.

3.3 Hours of Operation

Granite Products has planning permission (ref. P.2012.0121) to operate between the hours of 07:30 and 18:00 Monday to Friday and 08:00 and 13:00 on Saturdays. Operation of the waste recycling facility will take place during these hours.

3.4 Commencement of Activities

The recycling operations are scheduled to start in 2020. Granite Products will notify the States of Jersey before activities commence.

3.5 Manning and Management Plan

3.5.1 Environmental Management System

Granite Products (C.I.) Limited implement Brett Group's Quality, Health, Environment, Safety Together Management System (QHEST) which is accredited to the following standards:

- ISO 14001 Environmental Management Systems;
- ISO 19001 Quality Management Systems;
- BS EN ISO45001:2018, Occupational Health and Safety Management Systems;
- QSRMC Quality and Product Conformity Regulations 2017 (EN 206-1); and
- BES 6001 Issue 3 Responsible Sourcing of Construction Products.

QHEST has three levels of procedures. These include:

- Group procedures;
- Business specific procedures; and
- Site specific procedures.

A copy of the QHEST management system will be maintained in the Site Manager's Office.

3.5.2 Management Structure

The management structure, responsibilities and resources will be in accordance with the following QHEST procedure:

- BG2.1 Structure, Responsibilities and Resources.

A copy of the QHEST Structure, Responsibility and Resources procedure will be maintained in the Site Manager's Office

3.5.3 Staff Training and Development Systems

Staff training and development will be in accordance with the following QHEST procedure:

- BG2.2 Training, Awareness and Competence

A copy of the QHEST Training, Awareness and Competence procedure will be maintained in the Site Manager's Office with relevant records.

3.5.4 Staff Numbers and Job Titles

Staff responsibilities are defined in the following procedure:

- BG2.1 Structure, Responsibilities and Resources

A copy of the QHEST Structure, Responsibility and Resources procedure will be maintained in the Site Manager's Office.

Minimum operational staffing levels for the site will comprise one technically competent manager and trained operatives as required. For further details regarding the Site Management's Qualifying Experience, please refer to the Statement of Qualifying Experience in Section 4 of the application.

3.6 Emergency Procedures

Granite Products will have the following emergency procedures in place to manage circumstance such as fire/explosion on site, failure of pollution control systems, leaks and spills:

- BG5.1 Emergency Preparedness and Response (and resulting Emergency Action Plan)
- BG5.2 Reporting and Investigation of Accident, Incident and Complaint
- BG5.3 Near Miss Reporting
- BG5.4 Managing Injury Absence

A copy of the above procedures will be kept in the Site Manager's Office.

3.7 Maximum Duration of Waste Storage

There are three different types of storage areas proposed for the site;

- Feedstock;
- Sorted recycled materials (products); and
- Residual materials destined for landfill.

The storage areas will all be located within the recycling area and will be a maximum of 4m high.

Due to the inert nature of the materials proposed for storage at the site, no maximum storage period is proposed. Notwithstanding this, waste storage piles will be rotated under a 'first in first out' system to minimise storage times.

3.8 Financial Security

Granite Products intend to provide financial security by way of a 3-year renewable bond. A copy of the expenditure plan is provided in Section 6 of this application along with a statement on the financial security of the Brett Group of which Granite Products is a part.

4.0 SITE INFRASTRUCTURE

The Site Layout is illustrated in Drawing 003.

4.1 Site Access

The site is currently accessed directly from La Rue de la Vallée B26 which runs in a north east to south west direction adjacent to the northern boundary of the quarry. The new site access provides a single entrance and exit for waste vehicles (as well as some other product vehicles) as indicated in Drawing 003.

4.1.1 Control Procedures for Persons and Vehicles Arriving and Departing From Site

There are various control procedures in place, including a strict speed limit on site to minimise the impact in terms of noise, dust, local capacity and accidents.

Traffic will be controlled in accordance with the following QHEST procedure:

- BG3.7 Traffic Management.

A copy of the procedure will be kept in the Site Manager's office.

Visitors must sign in at the weighbridge office and receive relevant induction. Pedestrian routes are clearly marked.

4.2 Site Security

Site security is provided by the quarry's wider system of fencing, gates and natural barriers including rock faces, hedgerows and woodland. Access from the road is prevent by fencing, buildings and lockable gates. The licenced area itself is not fenced off from the rest of the quarry.

Gates/barriers at each of the entrances to the quarry will be closed and locked shut outside of operating hours. Where necessary for security purposes, some lighting may be switched on outside of operating hours.

Gates, barriers and fences will be inspected and maintained in accordance with the following QHEST Procedure:

- BG4.1 Monitoring and Inspection.

A copy of the procedure will be kept in the Site Manager's office.

4.3 Wheel Cleaning

The site will be located on a granite rock base with compacted granular surface. The internal access road is part concrete but mostly compacted granular material on a rock base – this access is also shared with aggregate customer vehicles entering the adjacent mineral processing/stockpile area. The roads are cleaned using water sprays, a roadsweeper and loading shovel bucket as conditions require and to date a formal wheelwash has not been necessary. Waste customer vehicles are not considered to require any additional/different wheel cleaning to aggregate vehicles at this stage, however should this prove not to be the case, a wheel wash will be constructed on site where necessary. Prior to installation, details would be provided to the States of Jersey including the specification, maintenance, breakdown cover etc.

Procedures are in place for the management of amenity issues as follows:

- JSY43 Amenity Management – Prevention of Dust, Mud and Noise Emissions
- BG4.1 Monitoring and Inspection.

A copy of the procedures will be kept in the Site Manager's office.

4.4 Noticeboards and Signs

The site is currently well signposted to avoid confusion or accidents amongst drivers and pedestrians. The site entrance will be labelled appropriately, and noticeboards will be provided at the weighbridge area and along the route for the new site layout.

A new noticeboard will be erected at the site entrance showing the following details relevant to the licence:

- Site Name;
- Licence number;
- Daytime/emergency contact telephone numbers; and
- Name and contact number for States of Jersey Department of the Environment.

4.5 Internal Roads

The internal haul road runs between the site entrance and recycling facility as shown on Drawing 003. From the public highway to south of the weighbridges the road is concrete whilst the existing haul road down into the quarry products area, to be shared by the recycling facility customer vehicles, is constructed from compacted granular materials on granite bedrock. Both types of road surface and will be regularly maintained to ensure an even running surface for vehicles.

Staff and visitor car parking areas will be provided in the wider quarry premises, safe from operational traffic.

4.6 Fuel Tanks and Bunding

There will be no fuel tanks located within the proposed licence boundary. Any fuel used in the recycling facility will be stored outside the proposed licence boundary in the wider quarry premises as is currently the case.

4.7 Weighing and Measuring of Loads

Two weighbridges will be installed to the north west of the existing mineral processing plant site, in easy access of the new entrance and exit point. Upon arrival at the site vehicles carrying inert materials for processing will be weighed. The location of the weighbridges is clearly shown on Drawing 003.

The weighbridges will be surface mounted bridges with a CCTV camera system that enables weighbridge personnel to see into the vehicles both entering and exiting the site.

Weighbridges will be operated in compliance with the following QHEST Procedure:

- BA7 Operation of a Weighbridge

A copy of this procedure will be kept in the Weighbridge Office.

Inspection and maintenance of the weighbridges will be carried out in accordance with the following QHEST Procedures:

- BG4.1 Monitoring and Inspection
- BG4.2 Plant and Equipment Maintenance
- BG4.3 Instrument and Equipment Calibration

The provision of two weighbridges will ensure that vehicles can be weighed when one is undergoing maintenance. In the unlikely event that neither weighbridge is operational, waste will only be accepted where a suitable alternative means of measurement is available e.g. customer has used an alternative/public

weighbridge, customer agrees to fixed assumed tonnage per load based on vehicle type or, for small one off loads, use of the weigh cell on the wheeled loading shovel.

4.8 Secure Compound

All waste accepted onto site will be inert. Any waste that requires quarantining will be isolated and stored within an area within the Waste Management Licence boundary segregated from other feedstocks using mobile signage and cones if necessary. Thereafter, arrangements will be made for the customer to transfer of the materials off-site to a suitably licensed facility.

4.9 Hardstanding/Parking

Hardstanding at the site will comprise the granite floor of the quarry.

There will be no parking within the site boundary.

4.10 Laboratory

There is a laboratory which currently services the quarrying and operations at La Gigoulande Quarry however this does not have the necessary accreditations to undertake waste sample characterisation/validation testing. As such, any waste samples will be sent off-site for chemical analysis at a UKAS accredited laboratory. The onsite laboratory may however undertake physical testing of recycled product in line with relevant highways specifications.

Waste samples have to date been sent to Element (formerly Exova and before that Jones) Environmental Laboratory, Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside CH5 2UA however Granite Products may send samples to alternative, accredited laboratories for analysis.

4.11 Drainage

4.11.1 Surface Water

Runoff from the recycling facility will be incidental and associated with any rainfall which is not absorbed or percolated into the ground. Due to the inert and low risk of the wastes to be stored at the site, it is not considered that active surface water management measures are necessary in practice.

There are no drainage ditches within the proposed licence boundary.

Any surface water run-off from the site will be picked up in the quarry's surface water drainage system prior to its discharge into the La Gigoulande Mill Stream in accordance with the quarry's existing deemed discharge consent (ref. DP(B)2000/11/03A, dated November 2000).

The quarry drains to a sump in the base of the western end of the quarry from where it is pumped to a settlement lagoon as shown on Drawing 003. On leaving the settlement lagoon the water passes through an interceptor prior to its discharge at the discharge point at La Gigoulande Mill Stream.

Some clean surface water is utilised for internal functions such as dust suppression.

The surface water drainage system will be regularly inspected and maintained where necessary. Regular sediment removal will take place to maximise retention time and hence silt settlement. Inspection and maintenance of the drainage system and monitoring of the final discharge is undertaken in accordance with the following QHEST Procedure:

- BG4.1 Monitoring and Inspection

- JSY07 Management and Monitoring of Site Water, Effluent and Discharges
- JSY36 Surface water Monitoring and Sampling

4.11.2 Haul Road Drainage

Internal haul roads will have an appropriate camber maintained to promote the drainage of surface water to the quarry drainage system. All roads will continue to be maintained to minimise the generation of dust or mud that could make its way into the drainage systems and stream.

4.12 Bays and Bins

Due to the nature of the proposed operation there are no storage bays proposed at the site. A covered skip will be provided for the storage of incidental contaminants e.g. a piece of wood or metal, that may be removed from the waste load by hand.

4.13 Site Office

A weighbridge office will be provided as part of the site reception area and will be located between the two new weighbridges. It will be fitted with suitable communication systems and will be used to record all wastes delivered to the site. The location of the weighbridge office is illustrated on Drawing 003. It will comprise a standard shipping container 2.4m x 6m in dimensions converted to a modern office environment.

Welfare and canteen facilities for staff will be provided by the existing La Gigoulande Quarry infrastructure, outside of the proposed licence boundary, as will an office for the Site Manager.

5.0 SITE PREPARATION

5.1 Surface Water Management

Runoff from the recycling facility will be incidental and associated with any rainfall which is not absorbed or percolated into the ground. Due to the inert and low risk of the wastes to be stored at the site, it is not considered that active surface water management measures are necessary in practice.

There are no drainage ditches within the proposed licence boundary.

Any surface water run-off from the site will be picked up in the quarry's surface water drainage system as described in Section 4.11.1.

5.2 Installation of Monitoring Facilities

5.2.1 Surface Water

Due to the low risk nature of the waste types and activities undertaken on site, it is not considered necessary for the licence to contain conditions relating to the monitoring of surface water. Surface water monitoring will be undertaken in accordance with existing arrangements pursuant to the quarry's existing deemed discharge consent. This monitoring regime is undertaken in accordance with the following QHEST procedures:

- JSY07 Management and Monitoring of Site Water, Effluent and Discharges
- JSY36 Surface Water Monitoring and Sampling

6.0 WASTE RECEPTION

6.1 Checking Loads

All loads will be inspected upon receipt to ensure compliance with permitted waste types.

Waste acceptance and control will be governed by the following QHEST IMS procedures, forms and guidelines:

- JSY40 Waste Acceptance Procedure for Granite Products Landfill and Recycling Facilities
 - JSY40 WI01 Receipt and Assessment of Waste Enquires;
 - JSY40 WI02 Receipt of Pre-approved Loads for Landfill and Recycling;
 - JSY40 WI03 Receipt of Non Pre-approved Loads for Recycling;
 - JSY40 WI04 Sampling and Validation Testing of Wastes; and
 - JSY40 WI05 responding to Non-Compliant Test Data

All staff assigned a role, or having a responsibility, under this and associated procedures receive relevant training in accordance with the QHEST procedure BG2.2 Training, Awareness and Competence.

6.2 Recording Loads

All loads of waste received at or removed from the site will be recorded. Records kept as a minimum will include date, time, type(s) of waste, weight/volume and carrier details.

Waste records will be completed in accordance with the following QHEST procedure:

- JSY40 and associate work instructions WI01 – WI03 listed above, and
- BG2.5 Records and Records Management

6.3 Rejection of Loads

All wastes will be inspected on the vehicle upon arrival to site. Non-confirming wastes will be rejected. If non-confirming loads are identified after the vehicle has left the site, the load will be isolated and stored within an area segregated from other feedstocks using mobile signage and cones if necessary. Thereafter, arrangements will be made for the transfer of the materials off-site to a suitably licensed facility.

Waste rejection will be carried out in accordance with the following QHEST Procedure:

- JSY40 Waste Acceptance Procedure;
- JSY40 WI02 Receipt of Pre-approved Loads for Landfill and Recycling; and
- JSY40 WI03 Receipt of Non Pre-approved Loads for Recycling.

6.4 Sampling and Analysis

Waste sampling and analysis will be carried out in accordance with the following QHEST Procedure:

- JSY40 WI04 Sampling and Validation

6.5 Testing of Wastes Handling, Segregation and Storage

Wastes will be handled appropriately. Upon tipping in the waste reception area each load will be inspected and, if acceptable, will be placed in the waste feedstock areas within the proposed inert waste recycling facility prior

to treatment. The waste will be physically treated by crushing and/or screening and will be moved between the stockpiles and the recycling plant by means of mobile plant, either a wheeled loading shovel or 360° excavator. Following treatment, the recovered material will be stored in designated storage areas prior to use on or sale. The residual waste which cannot be recovered will be temporarily stored at the recycling area prior to transfer to a suitably licensed landfill site following appropriate waste characterisation including testing. Initially this will be off-site pending the establishment of an inert landfill within La Gigoulande Quarry for restoration purposes.

All waste accepted at the facility will be inert in nature. Waste will be segregated according to the type of material.

Due to the inert nature of the waste, there will be no specific maximum storage period, however the site will operate a first in first out system to minimise storage periods.

7.0 SITE OPERATIONS

7.1 Plant and Machinery

The plant and machinery that will be used at the site will comprise:

- a mobile primary crusher;
- mobile secondary cone crusher;
- mobile tertiary cone crusher as required;
- two mobile screening units.

The plant will be loaded with either a 360 excavator or a wheeled loading shovel with the product moved from belt end with a wheeled loading shovel for direct sales or to the product stockpile area. Inert residue material will be transferred by internal dump truck into the landfill void space once established, and to a suitable off-site disposal facility prior to this.

Inspection and maintenance of plant and machinery will be carried out in accordance with the following QHEST procedures:

- BG4.1 Monitoring and Inspection
- BG4.2 Plant and Equipment Maintenance
- BG4.3 Instrument and Equipment Calibration.

In the event of plant breakdown, alternative machines will be sourced as soon as practicable, either from elsewhere on the quarry site or from off-site.

7.2 Compatible Wastes

Only inert wastes that are not biodegradable will be accepted onto site. Inert waste is waste that will not undergo any significant physical, chemical or biological transformation or reaction, or give rise to environmental pollution or harm human health.

It is therefore considered that all wastes accepted onto site will be compatible.

7.3 Special Waste Management Procedures

There are no special waste management procedures required on site due to the nature of the proposed operations and inert nature of the proposed materials.

7.4 Residues

Imported waste will be stored on site in feedstock stockpiles prior to being processed. This process will yield two products; processed material such as soil and secondary aggregate products and residual material unsuitable for further recycling.

This residual material will be deposited into an inert landfill to be developed at La Gigoulande Quarry. In the interim, residues will be sent off-site to a suitably licensed facility for disposal.

7.5 Leakages or Spills

The use of static and mobile plant and vehicles has the potential to cause leakages or spills on site.

Preventative maintenance will be undertaken in accordance with manufacturer's recommendations to minimise the likelihood of leaks or spills.

Minor spillages will be cleaned up immediately, using sand or proprietary absorbent to clean up liquids and placed in appropriate waste containers for off site disposal.

Materials suitable for absorbing and containing minor spillages will be maintained on site.

Site staff will undertake daily monitoring for evidence of spillage and leakage.

The Site Manager will be responsible for implementing risk management measures in accordance with the following QHEST procedures:

- BG4.1 Monitoring and Inspection
- BG4.2 Plant and Equipment Maintenance
- BG3.8 Housekeeping, Litter, Pest and Vermin Control
- BG5.1 Emergency Preparedness and Response and resulting Emergency Action Plan

7.6 Tidiness

The site will be monitored and kept tidy with storage areas maintained within capacity in accordance with the following QHEST procedure:

- BG3.8 Housekeeping, Litter, Pest and Vermin Control; and
- BG4.1 Monitoring and Inspection.

Significant quantities of windblown material/litter are not anticipated at the site due to the inert nature of the wastes. Storage areas will be kept within capacity by controlling the volumes of material accepted at the site and balancing inputs for treatment with the sale of recycled products. Notwithstanding this, inspections will be carried out by the Site Operative on a daily basis and any necessary remedial action will be taken to ensure the site is maintained in a tidy condition.

Any loose materials will be collected and placed in designated stockpile areas or in skips for off-site disposal.

7.7 Process

The process that will be undertaken at the site can be described as follows:

- Imported materials will be directed to the recycling facility and, following tipping and inspection, placed into feedstock storage prior to treatment;

- Waste will be crushed and/or screened to generate a range of secondary aggregate, soils or soil forming materials;
- Products will be segregated and stored according to their material characteristics in clearly labelled stockpiles prior to use on site or sale; and
- Residual waste will be stored at the recycling area pending landfill disposal.

8.0 POLLUTION CONTROLS

8.1 Dust

The following measures will be implemented to control and minimise emissions of dust from the site:

- All vehicles delivering waste to the site shall be sheeted to minimise emissions of dust;
- Speed limits will be implemented and enforced to minimise generation of dust;
- Site access and haul roads and operational areas will be maintained and repaired to minimise emissions of dust due to uneven and poor surfacing;
- All roads and operational areas will be swept where necessary to reduce dust emissions and dampened down as required;
- Daily, visual inspection at all areas of the site and site boundary will be carried out by site personnel;
- In the event that significant visual dust is observed at the boundaries of the operational areas, action will be taken to suppress the dust; and
- A record of the inspection findings and remedial action taken will be made in the site diary.

8.2 Noise/Vibration

The following measures will be implemented to keep noise and vibration to a minimum:

- Speed limits will be implemented and enforced for vehicles using the site;
- Site access and haul roads and operational areas will be maintained and repaired to minimise emissions of noise due to uneven and poor surfacing;
- Auditory inspections will be carried out daily and in response to complaints;
- A record of the inspection findings will be made in the site diary;
- Plant will be selected, operated and maintained to minimise noise; and
- Sound insulation or noise reduction measures as fitted will be used and maintained to manufacturer's specifications.

8.3 Odour

The following measures will be implemented to keep odours from the site to a minimum.

- No putrescible or readily degradable wastes will be accepted at the site;
- No odorous wastes will be accepted at the site;
- The site will be monitored for odours by site personnel throughout the working day;

- In the event that odours are detected, investigations will be undertaken to determine the cause and appropriate remedial action taken;
- In the event that odorous waste is delivered to site it will be segregated and removed at the earliest opportunity in line with waste rejection processes; and
- The Site Manager will be responsible for implementing risk management measures in accordance with QHEST procedures.

8.4 Vermin/Insect/Bird Control

Only inert waste will be accepted at the site. Accordingly, the site is unlikely to attract birds, vermin and insects. Notwithstanding this, the following suitable control measures will be implemented to manage vermin, insects and birds:

- Waste acceptance procedures will ensure that only inert wastes are accepted;
- In the event that birds, vermin and insects are identified at the site, a specialist pest control contractor will be employed to undertake remedial measures; and
- The Site Manager will be responsible for implementing risk management measures in accordance with QHEST procedures.

8.5 Litter

Only inert waste will be accepted at the site. Accordingly, the waste is unlikely to generate litter.

Notwithstanding this, the following suitable control measures will be implemented to ensure that no litter escapes beyond the site boundary:

- Waste acceptance procedures will ensure that only inert wastes are accepted;
- The site will be inspected on a daily basis and any litter identified collected in a suitable waste container for off site disposal; and
- The Site Manager will be responsible for implementing risk management measures in accordance with QHEST procedures.

9.0 MONITORING

All monitoring will be carried out in compliance with the following QHEST procedures:

- BG2.5 Records and Records Management;
- BG4.1 Monitoring and Inspection;
- BG4.2 Plant and Equipment Maintenance; and
- BG4.3 Instrument and Equipment Calibration.

All staff assigned a monitoring role, or responsibility, receive relevant training in accordance with the QHEST procedure BG2.2 Training, Awareness and Competence.

A copy of the procedures will be held in the Site Manager's office.

9.1 Surface Water

Due to the low risk nature of the waste types and activities undertaken on site, it is not considered necessary for the licence to contain conditions relating to the monitoring of surface water. Surface water monitoring will be undertaken in accordance with existing arrangements pursuant to the quarry's existing deemed discharge consent and in accordance with the following QHEST procedures:

- JSY07 Management and Monitoring of Site Water, Effluent and Discharges
- JSY36 Surface Water Monitoring and Sampling

9.2 Dust, Noise and Vibration

The measures detailed in Sections 8.1 and 8.2 will be implemented to keep noise and vibration to a minimum and control and minimise emissions of dust from the site.

Notwithstanding this, the following monitoring will be undertaken at the site:

- Daily, visual inspection at all areas of the site and site boundary will be carried out by site personnel;
- Auditory inspections will be carried out daily and in response to complaints; and
- A record of the inspection findings will be made in the site diary.

Monitoring will be implemented in line with the following QHEST procedure:

- BG4.1 Monitoring and Inspection
- JSY43 Amenity Management – Prevention of Dust, Mud and Noise Emissions

9.3 Odour

Only inert waste will be accepted at the site. Accordingly, the site is unlikely to generate odour.

The measures detailed in Section 8.3 will be implemented to keep odours from the site to a minimum.

Notwithstanding this, the site will be monitored for odours by site personnel throughout the working day.

Monitoring will be implemented in line with the following QHEST procedure:

- BG4.1 Monitoring and Inspection.

10.0 RECORDS

Records will be kept in accordance with the following QHEST procedure:

- BG2.5 Records and Records Management

10.1 Wastes Received and Removed

Records will be kept of all wastes received and removed from the site.

The Weighbridge Operator will keep a full computer record of the details of each delivery including date and time, weight, type of waste and haulier details.

Records will be maintained in the site control office.

10.2 Rejected Wastes

Records will be kept of all wastes rejected from the site, both those rejected upon arrival at the weighbridge and those upon tipping in the waste reception area.

A record will be made of the haulier, origin and characteristics of the waste using the waste rejection form under JSY40 and associated work instruction.

If the waste has been tipped and it is not possible to reload it into the customer vehicle, the waste will be quarantined and arrangements made with the customer for removal or onward appropriate disposal of the waste.

Annual submissions of the waste rejection records will be provided to the States of Jersey.

10.3 Site Diary

A site diary will be maintained on site in the Site Manager's office for use by all relevant staff including the Weighbridge Operative, Recycling Operatives and Site Manager to record specified events. It will be updated as necessary and supported by various records required by the relevant QHEST procedures. It will also be available during site inspection and audit by internal and external auditors and the States of Jersey.

10.4 Monitoring Data

No gas, surface water or groundwater monitoring is proposed to be undertaken. As such, it is not proposed that monitoring data submissions will be made to the States of Jersey.

10.5 Waste Analysis

The results of all waste analysis will be maintained at the Site Manager's office.

10.6 Site Inspections

The site will be inspected daily in accordance with the appropriate QHEST procedures. Records of site inspections will be maintained in the Site Manager's office.

11.0 SITE COMPLETION

11.1 Site clearance

Upon cessation of operations the site will be cleared of all waste materials stored on the site. Thereafter, an assessment of the site's condition will be made with reference to its condition prior to the commencement of operations. Works will be undertaken as necessary to return the site to a condition comparable to that existing before operations commenced on the site.

EUROPEAN OFFICES

United Kingdom

AYLESBURY

T: +44 (0)1844 337380

BELFAST

T: +44 (0)28 9073 2493

BRADFORD-ON-AVON

T: +44 (0)1225 309400

BRISTOL

T: +44 (0)117 906 4280

CAMBRIDGE

T: + 44 (0)1223 813805

CARDIFF

T: +44 (0)29 2049 1010

CHELMSFORD

T: +44 (0)1245 392170

EDINBURGH

T: +44 (0)131 335 6830

EXETER

T: + 44 (0)1392 490152

GLASGOW

T: +44 (0)141 353 5037

GUILDFORD

T: +44 (0)1483 889800

LEEDS

T: +44 (0)113 258 0650

LONDON

T: +44 (0)203 691 5810

MAIDSTONE

T: +44 (0)1622 609242

MANCHESTER

T: +44 (0)161 872 7564

NEWCASTLE UPON TYNE

T: +44 (0)191 261 1966

NOTTINGHAM

T: +44 (0)115 964 7280

SHEFFIELD

T: +44 (0)114 245 5153

SHREWSBURY

T: +44 (0)1743 23 9250

STAFFORD

T: +44 (0)1785 241755

STIRLING

T: +44 (0)1786 239900

WORCESTER

T: +44 (0)1905 751310

Ireland

DUBLIN

T: + 353 (0)1 296 4667

France

GRENOBLE

T: +33 (0)4 76 70 93 41