SEALES ROAD HAULAGE LTD QUALITY PROTOCOL: PRODUCTION CONTROL SYSTEM OF FINE FILL MATERIAL & RECYCLED TYPE 1 803

Flow Chart for the acceptance and processing of waste

Factory production protocol

Products provided

Acceptance criteria of incoming waste

Production Method statement

Testing

Record Keeping

Quality Statement

Information supplied by the Producer

Appendix 1: Full Method Statement of production

Appendix 2: Example of a batch document

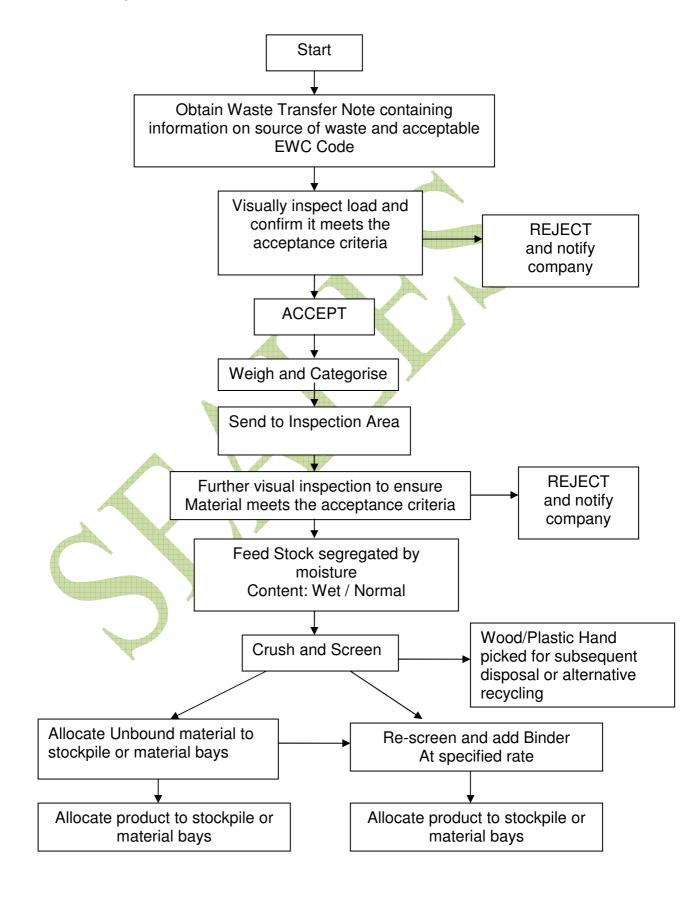
Appendix 3: Waste Acceptance policy

Appendix 4: Corrective Actions – Constituency Failure

Appendix 5: Corrective Actions – Mix design Failure

Appendix 6: Example of an Audit to ensure compliance with the Quality protocol

Excavated material from various locations will be delivered to the recycling facility, which will have an Environment Agency approved waste management licence or exemption



3.1 Factory Production Control

Responsibility and Authority

- 1) Recycling manager/Management Representative: Will be responsible for ensuring the requirements of the protocol are implemented and maintained.
- 2) Site Manager: Responsible for the day-to-day running of each production site.
- 3) Production operatives: Ensure that the work carried out is to the protocol and are instructed by the site manager.

Internal Audits

These will be carried out by the Recycling Manager, every 6 months. The information will be stored and kept for a minimum of 3 years and will be available to all customers on request.

Management Review

This will be carried out annually or as appropriate with the introduction of new or amendment to existing legislation.

Sub-Contract Services

Any Sub-contract services employed by the company will be expected to adhere to this protocol and will be issued with a copy of this protocol prior to work commencing.

Records

Refer to 3.6, 3.7 and 3.9

Training

All personnel involved in the process will be trained to conform with the protocol and other relevant legislation. Appropriate training records will be kept and maintained. Only suitably qualified personnel will be allocated assigned tasks in the protocol.

Control procedures

Refer to 3.5 and Appendix 1

Composition of mixture, Constituents and process Control

Refer to 3.5 and Appendix 1. Constituency testing can also be found in 3.6.

Inspection and Control of Process Equipment

DEVICE	FREQUENCY	TEST PROVIDER
Viper Screener	Annual	Fitter

Handling and Delivery

See 3.5 and Appendix 1

Inspection and Testing

See 3.5, 3.6 and Appendix 1

Non Conformity

See 3.4 and Appendix 3

Non-conformity of Mixture

See 3.6.1 daily Production Test.

3.2 & 3.3 Products provided

- 1. **10mm to dust Fine Fill:** A 10mm to Dust recycled aggregate. The content of foreign materials shall be less than 1%.
- 2. **Recycled Type1 803:** A 63mm< Recycled aggregate that complies with the Specification for Highways Works Vol.1 Clause 803. The content of foreign materials shall be less than 1%.

3.4 Acceptance Criteria: Incoming Waste

- Registered Waste carrier enters the recycling facility and submits his waste transfer note that will comply with Level 1 Basic Characterisation as set out in the Landfill Regulations England and Wales 2002, 2004 and 2005 (see appendix 3). Waste should only be accepted from legitimate Registered Waste Carriers.
- 2. A visual inspection is made on the load to ensure that it matches the waste transfer note and that the correct EWC code has been used to categorise the load.
- 3. If the material does not match the description on the waste transfer note it is rejected and the company delivering the load notified of this action.
- 4. The material is then weighed on the weigh bridge and visually categorised by moisture content (Wet or normal). If available a moisture probe should be used
- 5. The load is then tipped in a 'Inspection Area' where a second visual inspection is made that the waste matches the description on the Waste Transfer Note. If it does not the load is rejected and the company delivering the load notified of this action.
- 6. The waste transfer note is then stored and kept for a minimum of 3 years.
- 7. The accepted load will now be taken to the recycling area for processing.
- 8. A waste acceptance note must be completed in addition to the WTN supplied by the Customer

Only the following European Waste Codes can be accepted:

- 17.01.01. Clean Concrete
- 17.01.07. Mixed Concrete, brick, tiles and ceramics, not containing dangerous substances.
- 17.03.02. Bituminous Material not containing dangerous substances
- 17.05.04. Inert Soil & Stones, not containing dangerous substances
- 17.05.08. Track Ballast, not containing dangerous substances

A record of each load delivered and accepted shall be entered on the waste acceptance/delivery note and retained providing the following information:

- a) date
- b) nature and quality
- c) place of origin
- d) quantity by weight
- e) carrier
- f) supplier

3.5 Method Statement of Production

(A full method statement of production can be seen in Appendix 1)

10mm to dust Fine Fill

- 1) The suitable material will first be screened and then enter the recycling process where the following will occur:
- 2) A segment of the material will be screened to <10mm
- 3) Oversize material will be crushed and then re-screened.
- 4) A segment of the material will be will be re-screened <10mm and added to the other <10mm material. This will ensure sufficient granular content in the finished product.
- 5) The finished product will then be transferred into covered holding bays.
- 6) The holding bays will display the following information:
 - Date of production
 - Batch number

Recycled Type1 803

- 1. The suitable material will first be screened and then enter the recycling process where the following will occur:
- 2. 75 mm+ oversize material will be crushed to 60mm<
- 3. This material will then be put back through the crushing plant and re-crushed to 40mm<.
- 4. The finished product will then be transferred into covered holding bays.
- 5. The holding bays will display the following information:
- Date of production
- Batch number

6. The finished product in the covered holding bays is now ready for dispatch and samples to be taken for testing.

3.6.1 Testing

Product performance compliance testing will be carried out at varied frequencies depending on the test to be conducted. The following Test schedule will be adhered to at all times. Every test batch will also be assigned a batch number to ensure traceability.

10mm to Dust: Fine Fill

Testing Weekly

The testing should be carried out after 500 tonnes of production or weekly, whichever comes sooner.

(It should be noted that time periods relate to production periods and not calendar periods)

Particle Size Distribution
 Plasticity Index to
 BS 1377-2:1990
 BS 1377-2:1990

Recycled Type1 803

Weekly Testing

The testing should be carried out weekly.

(Time Periods relate to production periods not calendar periods)

Particle Size Distribution:

Plasticity Index:

Clause 710:

BS 1377-2:1990
BS 1377-2:1990
BS 8500-2

6 MONTHLY

Los Angeles Coefficient:

MDD:

OMC:

Magnesium Sulphate:

Frost Heave:

TRL Report 447

BS EN 1097-2: 1998

BS 1377-4:1990 clause 3.7

BS EN 1367-2: 1998

BS EN 1367-2: 1998

BS 1377-5: 1990: Method 7

(If required)

3.6.2

It should be noted that the minimum test frequencies suggested in the WRAP Quality protocol for the production of Aggregates from Inert Waste are applicable to the production of the above Recycled Products.

3.7 Record Keeping

The following records will be kept and available to the customer at any point in time upon request:

- 1. Waste Transfer notes (retained for a minimum of 2 years)
- 2. Batch data that will include:
 - Batch number
 - Date of Production
 - UKAS Test results of the relevant test batch
- 3. Actions taken following a batch failure
- 4. Copy of Waste Management Licence Exemption or Waste Management Licence.
- 5. Corrective actions taken where constituents or mixture examined have not satisfied the requirements of this protocol. See appendix 4 and 5

3.8 Quality Statement

This Quality Protocol has been written to conform with the WRAP Quality Protocol for the production of aggregates from inert waste.

3.9 Information to be Provided by the producer

When requested by the purchaser, the producer shall provide:

- a) test results
- b) test procedures
- c) outline details of the factory production control manual.

APPENDIX 1: Method Statement of Production

General Instruction

The excavated Spoil materials are removed from site by a suitable vehicle, and taken to an EA approved site for processing. The Excavated Spoil material is received into a designated area at the site pending processing. The qualified Operative shall assess the suitability of the material in accordance with NRSWA 1991 standards, and the appropriate EWC Waste Codes accompanying each load via its Waste Transfer Note. All records produced during this entire process (Including Waste Transfer Notes) shall be retained for a minimum of 2 years for Environment Agency and or Local Highway Authority Audit purposes.

If the material is deemed suitable, assessment of soil type (granular, sand or clay), and soil moisture content (dry, wet or very wet), shall be made. Wet materials can be stored and "air dried" to reduce moisture content prior to processing. Organic materials such as peat are not suitable, cannot be used, and must be segregated and stored outside the production area to avoid contamination.

Every effort should be made to ensure the suitable material to be treated is free of contaminants such as wood, plastic and metal, should any be found in excess of 1% by mass or volume (whichever is greater), it must be removed and discarded prior to processing.

Any Plaster (Gypsum etc.) present (regardless of quantity) must be removed and discarded and cannot be included in the material to be treated.

All unsuitable material should be placed in the "Inspection Area" pending Waste Acceptance Criteria testing and ultimate disposal into an appropriate area.

It is desirable that suitable material is pre-screened prior to loading into the "Achiever" machine. Oversize material will be crushed to below 40mm diameter, and re-introduced into the production process as required.

N.B. It is good practice to sheet/cover untreated spoil, especially if it is raining.

10mm to Dust Pipe Bedding

Only use suitable material. This can be achieved as shown above by segregating material by moisture content (dry/normal/wet).

Screen the suitable material to <10mm and stockpile. If there is any oversize material, process this through the crusher and crush to <40mm. Re-screen the crushed material again and screen out the <10mm fraction. Add this <10mm fraction to the rest of the <10mm screened material. Mix these two fractions together with a loading shovel or the bucket of the 360 degree excavator. Additionally the material could then be re-screen to <10mm to aid the mixing process.

Allocate the finished product to a sheeted/covered bay for storage. The batch number of the <10mm to dust pipe bedding Material bay should be displayed.

Recycled Type1 803

The suitable material is pre-screened prior to entering pre-production bays. Pre-screened material is separated into different sizes in regard to the grading specification for Type1 803. Oversize material is crushed to below 40mm diameter, and re-introduced into the production process as required. All pre-production sizes are blended together at the correct percentages to create the correct particle size distribution for type1 803. This material is then processed through the Screen Machine Achiever/Might.

Always record whether the collection vehicle is sheeted following loading with Recycled Type 1 803.

All lorries collecting *Recycled Materials* shall first weigh in whereupon they shall be given a loading authority ticket (no lorries to be loaded without this authority) the shovel driver will load the required Recycled Material(s) and write on the authority the batch number (which is also the date of manufacture) for return to the weighbridge, this must be recorded on the weighbridge ticket.



Appendix 2

SEALES ROAD HAULAGE RECYCLING DEPOT: Recycled Type1 803

Recycled Type 1803	
Address: River Road, Barking	
Batch number:	
Date of Production:	
WRAP Minimum Testing:	
PSDPass / Fail	
Plasticity:	
Clause 710: Pass / Fail	
Production Day 1:	
Production Day 2:	
Production Day 3:	
Production Day 4:	
Production Day 5:	

SEALES ROAD HAULAGE RECYCLING DEPOT: Fine Fill

<u>1 me 1 m</u>	
Address: River Road, Barking	
Batch number:	
Date of Production:	
WRAP Minimum Testing:	
PSDPass / Fail	
Plasticity:	
Production Day 1:	
Production Day 2:	
Production Day 3:	
Production Day 4:	
Production Day 5:	

Appendix 3: Waste Acceptance Policy

ONLY THE FOLLOWING EWC CODES ARE TO BE TIPPED:-

- 17.01.01. Clean Concrete
- 17.01.07. Mixed Concrete, brick, tiles and ceramics, not containing dangerous substances
- 17.03.02. Bituminous Material not containing dangerous substances.
- 17.05.04. Inert Soil & Stones, not containing dangerous substances
- 17.05.08. Track Ballast, not containing dangerous substances

ONLY WASTE COVERED BY THE AFOREMENTIONED EWC CODES CAN BE ACCEPTED. WASTE FALLING OUTSIDE OF THESE CRITERIA MUST BE REJECTED.

All waste tipped must be accompanied by a completed Waste Transfer Note, which must contain the following information:

- 1. An accurate description of the waste
- 2. The correct EWC Code
- 3. The process producing the waste
- 4. The location at which the waste was produced
- 5. As from 30/10/07 Pre-treatment Status of the waste
- 6. Any other information required to comply with your Duty of Care under EA legislation

THE SITE OPERATOR RESERVES THE RIGHT TO REJECT ANY WASTE THEY CONSIDER IS, OR MAYBE MIS-CODED AND/OR UNSUITABLE FOR RECYCLING. ANY MIS-CODED AND/OR UNSUITABLE WASTE TIPPED BY THE CUSTOMER MUST BE REMOVED FROM THE FACILITY WITHIN A REASONABLE TIMESCALE AND AT THE CUSTOMERS EXPENSE.

Appendix 4: Corrective Actions – Constituents failure

SEALES ROAD HAULAGE RECYCLING DEPOT		
Address: River Road, Barking		
Constituency failure on waste load		
Transport company carrying load:		
Name of relevant person from the transport company contacted regarding load failure:		
Date:		
Load rejected:		
Date: Time:		
Name: Signed: Signed:		
Comments:		
Comments		

Appendix 5: Corrective Actions - Mixture failure

SEALES RECYCLING DEPOT		
Address: River Road, Barking		
(A mixture failure can be identified by failing to achieve the UKAS required tests noted in the testing regime).		
Date:		
Corrective Action Taken:		
Name:		
Signed:		

Appendix 6: Audit to ensure compliance with the Quality protocol

(River	Road,	Barking
--------	-------	---------

Names of Personnel

Recycling manager/Management Representative:Site Manager:	
Production operatives:	
Have the above been certificated?	YES/NO
If no what actions have been taken	120/140
Waste Acceptance	
 All Waste Transfer notes present and kept for a minimum of 2 y 	
• Correct EWC codes used?	YES/NO YES/NO
 Rejected Loads forms present and correctly filled in? 	YES/NO
 Actions taken and followed up for rejected loads? 	YES/NO
If No to any of the above, what corrective actions to the above.	
taken?	
Method statement	
 Do all operatives have access to a method statement? 	YES/NO
• Are all operatives fully conversant with the method statement?	
• If No to any of the above, what corrective action	
taken?	
Testing and record Keeping	
 Records present and kept for a minimum of 2 years? 	YES/NO
• Frequencies of testing correct?	YES/NO
• Batch documents present containing correct information:	
• Batch number?	YES/NO
• Production date?	YES/N
• CBR testing?	YES/NO
 PSD/Clause 710/Plasticity 	YES/NO
• Pass/fail data?	YES/NO
 If No to any of the above what corrective actions have been take 	n?

•		• • • • • • • •	• • • • •
		• • • • • • • •	• • • • •
		• • • • • • • •	• • • • •
Load a	and Batch Failures		
•	Records kept for a minimum of 2 years? Correct actions taken?	YES/N	
•	If No to any of the above, what corrective action taken?	has	been
		• • • • • • • • • • • • • • • • • • • •	•••••
			•••••
Inspect	tion and Control of Process Equipment		
•	Has the process equipment been tested at the relevant frequencie the Quality protocol? If no, what date has training been arranged for? Date:	yES/I	
Other			
•	Is the Waste Permit or Exemption readily available and up-to-date. If no, what action has been taken to achieve the relevant Waste	YES/I	-
	Exemption?		
Da	te of Audit: Signed:		