Section 3

REMONDIS®

WORKING FOR THE FUTURE

ENVIRONMENTAL MANAGEMENT SYSTEM

Birtley Transfer Station - Site Work Plan

Document Control

Document ID	BIRTLEY EMS 001	**Prepared by**	Neil Cook
Document Title	Environmental Management System	**Authorised by**	Remondis Senior Management
Standard | Clause	ISO 9001:2015 | 6 Planning		

Version | Revision	Date of Inception	Next Review by	Status | Summary of Changes
1.0	1st June 2019	12 Months	Authorisation and inception
1.1	1st June 2020	12 Months	Annual Review and implementation of a site Fire Prevention Plan

Table of Contents

Introduction

i) Site Location / Description

The Birtley site is located on West Line Industrial Estate, Birtley. DH2 1AU. The site forms part of a large industrial area which is also occupied by various other businesses.

National Grid Reference NZ 267549 at Birtley, Chester le Street, County Durham. DH2 1AU.

ii) Licence Area

The area covered by the Environmental Permit is outlined in red as shown in *Figure 1* below**;**

Figure 1 – Site licence plan

All references to the 'Site' in this working plan shall mean the area and infrastructure, plant and equipment associated with the site.

iii) Licence Holder

The site operates under Environmental Permit (EP) EPR / EP3495LQ. The operator is Remondis Limited (company number 04696376), whose registered address is;

Stephenson Way,
Barrington Industrial Estate,
Bedlington,
Northumberland.
NE22 7DL

Telephone: 01670 827 820

iv) Site History

The Environmental Permit was originally issued as a Waste Management Licence dated 31st August 2005 to Mr. Stewart Storey before being transferred in full to JBT Waste Services Ltd on the 16th October 2009 and subsequently to Remondis Ltd in December 2017 as shown in *Table 1 below;*

Table 1 – Environmental permit revision record

Date	Status / Revision
31/08/2005	Issue of EA Waste Management Licence EAWML64154.
07/11/2008	Waste management licence modified to update the conditions to implement the Waste Electrical and Electronic Equipment (Waste Management Licensing) (England and Wales) 2006 directive.
16/10/2009	Permit Transfer (T0010 - Permit transferred in full from MR Stewart Storey to JBT Waste Services Ltd.
23/03/2010	Permit Variation (V002): To change the facility name from Stewart Storey Transfer Station to Westline Transfer Station.
12/12/2017	Permit Variation (V003): Permit varied to reflect a change in the company name from JBT Waste Services Ltd to Remondis JBT Ltd.
25/02/2019	Permit Variation (V005): Permit varied to increase the site boundary and to add the Fire Prevention condition.

1. Management

1.1 General Management

1.1.1 This site Environmental Management System (EMS) identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-compliance and those raised as complaints.

1.1.2 The operator will comply with a Technical Competence Scheme providing supervision to operations as required under the terms of the Waste Management Licencing Regulations 1995 (as amended). Copies of relevant COTC can be provided on request.

1.1.3 Records demonstrating compliance to 1.1.1 and 1.1.2 are maintained and kept as detailed in ***Section 4*** of this document.

1.1.4 Availability of the Environmental Permit and Environmental Management System - A copy of the Environmental Permit and Environmental Management System and supporting documents will be kept available on display at the site for reference when required by all site staff carrying out work under the requirements of the Permit.

1.2 Accident Management Plan

1.2.1 The Site has developed an Environmental Accident Prevention and Management Plan which complies with the Environment Agency's general requirements for such a plan. The plan forms part of this management system and is detailed in ***Appendix 3***.

1.2.2 **Maintenance and Implementation of the Environmental Accident Management Plan**

The Plan is implemented via the Site's general management procedures and maintained by application of the following:

- Identifying events or failures which have the potential to cause adverse environmental impacts;
- Assessing the likelihood of these occurrences and the potential environmental consequences;
- Taking action, to minimise the potential cause and consequences of accidents; and
- Identifying actions to be taken to minimise the consequences should accidents occur.

In the case of an accident that has the potential to cause, or does cause, an adverse environmental impact the operator has plans in place to:

- Undertake immediately any action required by the Plan;
- Undertake any other action required to minimise the environmental consequences;
- Investigate the causes of the event and act to prevent recurrence.

Accidents have been categorised in the Environmental Accident Prevention and Management Plan (***Appendix 3***). Members of staff are assigned specific responsibilities under the terms of the Plan and are required to respond and record their actions accordingly.

1.2.3 **Plan Review**

As a matter of routine, the Plan will be reviewed each year or as soon as possible after an incident, whichever is the earlier.

1.2.4 **Identified Changes**

The review will identify appropriate changes to the plan which will be recorded and inserted as amendments as necessary.

1.3 Site Security

1.3.1 A UKAS accredited security company has been employed to help manage and monitor the site security arrangements.

1.3.2 **Site Access, Fencing and Gates**

A 2.4-metre-high palisade fence with lockable gates protects the facility.

Daily visual inspections of the site infrastructure, carried out by the Site Management Team will identify any unsatisfactory fence conditions, e.g. evidence of trespass. If appropriate, a temporary repair will be made immediately and permanent repairs will be programmed in for completion within a 15 working day period.

A record of the daily inspection, along with any required remedial actions will be kept in the site diary.

The site staff have also been instructed that, in the event of finding evidence of unauthroised access and / or vandalism, the matter must be reported to the TCM or another member of the Site Management Team who will then take the appropriate action and record the matter following the company's procedures.

Entrance to the Site is gained via 3 access points:

- Weighbridge access gate;
- Pedestrian gate;
- Large vehicle access gate (occasional use).

To ensure the security of the site and prevent access during non-operational times by vehicles and pedestrians the gates will be locked at times when the site is not active.

1.3.3 **Monitoring**

The site has a CCTV system which was installed and is monitored by a UKAS-Accredited Security Monitoring Organisation. The CCTV system operates on a motion detector basis meaning that the nearest camera is drawn to any movement detected on site and an alert is made to the security monitoring company.

In the event on unauthorised access to the site during non-operational times, the security company will inform the site responsible persons who will act accordingly. The CCTV system is also inclusive of cameras with thermal detection functionality and the ability to detect a fire and alert the security company.

1.4 Site Infrastructure

1.4.1 Site Layout

A site layout plan has been shown in ***Drawing 1*** and contains the following information;

- Tipping and waste storage areas consist of an impermeable surface;
- The location of the waste processing building with impermeable surface;
- Fixed plant location;
- The location of the site offices;
- The location of the site weighbridge;
- Storage location of any oils and fuel;
- Site security fencing;
- Spill kit locations;
- Entrances and exits to the site (including those that can be used by the emergency services);

1.4.2 Site Surfaces

All areas of combustible waste storage take place on an impermeable surface with adequate curb-line and / or ground slope towards the site drainage system.

1.4.3 Site Drainage

A drainage plan has been added ***(Drawing 2)*** which shows;

- The location of manhole covers and drains;
- The direction of flow of water in the site drains;
- The location of an underground attenuation system;
- The location of a drainage isolation point;
- Location of the full retention oil interceptor.
- Discharge location to the combined sewer.

The detailed surface water drainage system collects water from the yard surfaces and diverts it through an underground attenuation process. This process slows the flow of the water before allowing it to enter a settlement chamber.

Following this, the water is channelled through an underground full retention oil separator before being discharged to a combined sewer (under a section 106 discharge agreement).

The clean rain water from the roof surface of the main processing warehouse is diverted into the surface water drainage system.

The site has the ability to block the water ingress pipe to the full retention oil separator, effectively sealing the site drainage system.

The facility also has a separate foul water system, running directly from the offices, which is linked to the same discharge point at the combined sewer.

1.4.4 Site Identification Board

The site identification board is positioned at the site entrance and displays the following information:

- Site name and address;
- Environmental Permit holders name;
- Operators name;
- Environmental Permit (Waste Management Licence) number;
- Emergency contact name and telephone number;
- Statement that the site is authorised by the Environment Agency;
- Environment Agency emergency national telephone and general number;
- Days and hours the site is open to receive waste.

1.4.5 Waste Reception

All waste reception is conducted on an impermeable surface. All mixed waste reception is conducted within the waste processing building.

1.4.6 Oil / Fuel Storage

Oils and lubricants are stored on site for use within the facility. Currently, oils are stored in 5-gallon drums, on top of self-contained bunds and under cover.

Diesel fuel is stored in minimum quantities, within a purpose-built trailer, inclusive of secondary containment and located on an impermeable surface.

1.4.7 Site Inspection and Maintenance

The Site is inspected on a regular basis by the Site Operations Manager as well as maintaining documented records of daily inspections carried out by Site Supervision. In addition, the Site maintains a planned preventative maintenance (PPM) scheme where items of non-compliance are recorded and appropriate timescales and owners are identified according to priority.

Site inspections will also include that of any fencing, concrete surfaces, storage bays etc. Action will be taken to ensure that any damage found will be repaired as soon as practicable.

The Site maintains a 'clean as you work' Policy, ensuring all work areas are kept within a reasonable state of cleanliness. Additionally, the Site conducts regular housekeeping tasks whereby the processing plant, designated storage areas and the site yard are maintained.

The Site will be maintained in a tidy condition.

2. Operations

2.1 Permitted Activities

These are in accordance with the Site's Environmental Permit and the Site's Environmental Management System Working Plan.

The following permitted activities are carried out at the Site have been shown in *Table 2* below (Table taken from the Environmental Permit);

Table 2 – Specified waste management operations

Description of activities	Limits of activities
R13: Storage of waste consisting of materials intended for submission, on this site to any of the category "R" operations authorised under this column, or elsewhere than on this site, to any of the operations listed in Part IV of Schedule 4 of the 1994 Regulations, (excluding temporary storage, pending collection, on the site where it is produced). **D15:** Storage pending, on this site and of the category "D" operations authorised under this column, or elsewhere than on this site, any of the operations listed in Part III of Schedule 4 of the 1994 Regulations, (excluding temporary storage, pending collection, on the site where it is produced).	Maximum storage capacity 320 tonnes
R2: Recycling or reclamation of organic substances which are not used as solvents. **R3:** Recycling or reclamation of metals and metal components. **R4:** Recycling or reclamation of other inorganic materials.	Treatment consisting only of physical sorting or separation of wastes into different components for recycling or reclamation.

2.2 Waste Acceptance and Hours of Operation

Waste types accepted, maximum quantities and hours of operation are as follows:

2.2.1 Waste Types and Quantities

In accordance with the Environmental Permit, only waste types detailed in ***Appendix A of the Permit*** will be accepted onto the site.

Permitted quantities of waste in accordance with the Environmental Permit have been detailed in *Table 3* below ***(Table 1.2A taken from the Environmental Permit)***.

Table 3 – Permitted quantities of waste

Permitted quantities of wastes	The total quantity of waste accepted at this site per year shall not exceed 74,999 tonnes
Exclusions	Notwithstanding the specification of waste types below, wastes shall not be accepted at the site which have any of the following characteristics: • Consisting solely or mainly of dusts, powders or loose fibres; • Wastes that are in a form which is either sludge or liquid.
Permitted Waste Categories	Maximum Permitted Quantities for each waste category (subject to maximum permitted total quantity in condition 1.2.2 (Permit) (tonnes/year)
Inert wastes	No limit subject to maximum storage capacities detailed in Table 1.1 (Permit).
Non-hazardous waste	No limit subject to maximum storage capacities details in Table 1.1 (Permit).
Hazardous Waste	Not permitted.

2.2.2 Hours of Operation

The hours of operation at the Site will be in accordance with the Site's planning permission, but generally follow the below;

- Weekdays, Monday to Friday 07.00 – 19.00
- Saturday, Sunday and Bank Holidays 07.00 – 19.00

2.2.3 Waste Acceptance

A full waste acceptance, rejection and quarantine procedure has been implemented as part of the Site EMS. See ***Appendix 2***.

On arrival at the site all incoming waste loads will be directed to the weighbridge where their incoming weight and other relevant details, including the below, will be taken and recorded on the computer system:

- Date and time of receipt of waste;
- Vehicle registration number;
- Name and address of customer / haulier;
- Waste type;
- Waste carriers registration number.

Where the vehicle allows, the weighbridge operator will visually inspect the incoming load to ensure that the waste conforms to the site Environmental Permit and the Waste Transfer Note. If it is not possible to visually inspect the load at the weighbridge then the load will be inspected once tipped at the relevant location.

Non-conforming waste may be identified at the weighbridge or in the tipping area. If site-based staff need further clarification as to whether the waste can be accepted or not, then they will contact the TCM for the site. Once identified, such wastes are either prevented from tipping on site or removed from site in a manner that ensures their satisfactory disposal.

Non-conforming wastes discovered within a load that has been deposited at the facility will be isolated and stored in a suitably designated quarantine area within the site. It will remain quarantined until removed by a licenced hauler and disposed of at an appropriate facility.

The Environment Agency will be notified of any hazardous waste that presents a significant risk to human health and the environment and details of which will be recorded within the Site Diary.

Once the vehicle has discharged its load it is then directed back onto the weighbridge and the vehicle tare weight will be recorded. A weighbridge ticket is then printed, signed by the operating company and hauler and issued to the driver. A copy will be retained by the Site.

2.2.4 Records

All waste deliveries to the Site are recorded and categorised as equivalent to the outgoing tonnages and waste types.

2.2.5 Handling and Processing of Wastes

All mixed waste skips, once inspected at the weighbridge, will be discharged and handled within the main processing building.

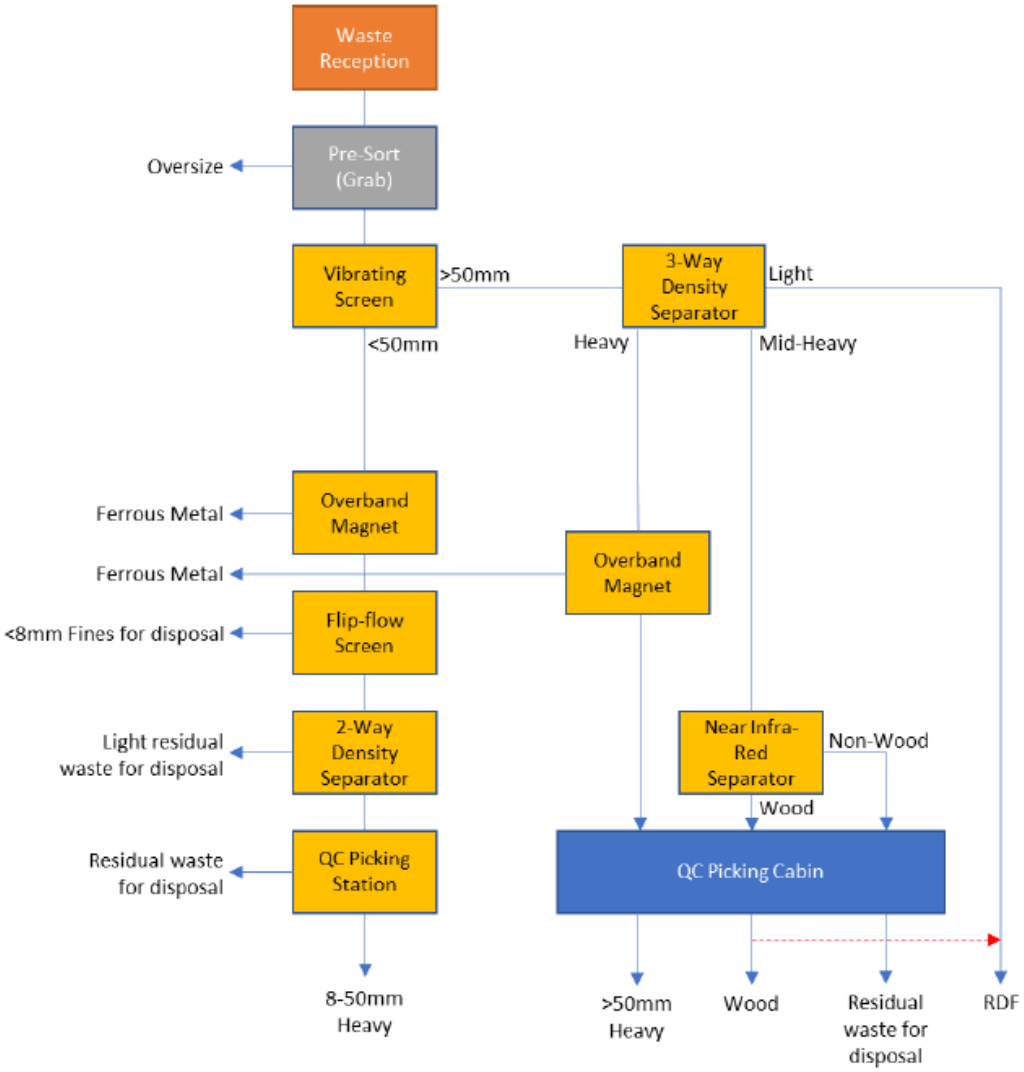
At the point of discharge, each deposit will undergo a further visual inspection to ensure compliance with the conditions of the site Environmental Permit.

Prior to being added to the main waste processing stockpile, the mixed waste deposited from each skip is pre-sorted whereby any oversized or non-conforming waste materials are removed via mobile plant.

A recycling plant is located within the processing building which is loaded directly from the plant feed waste stockpile by a 360 excavator (suitable grab attachment) which transfers material from the stockpile into the plant feed hopper.

The material then passes through a number of mechanical and manual separation processes which separate each type of material into its own bay / skip. This process has been detailed in ***Figure 2*** below;

Figure 2 – Mixed C&D Process Flowchart



Each type of material is then removed from the relevant bay and stockpiled on site, before being loaded and exported from the site.

Inert material such as stone, hardcore, brick etc. is also crushed on site to produce a graded recycled aggregate under the WRAP protocol for sale into the construction sector.

2.2.6 Management of Waste Stockpiles

Waste stockpiles and storage locations are managed in accordance with the Fire Prevention Plan (***Appendix 4***), which include details of;

- Location and arrangement of waste storage on site;
- Storage time for each type of waste;
- Stockpile dimensions;
- Storage controls;
- Management system controls around waste storage;
- Quarantine Area.

Stockpile Segregation

Stockpiles are segregated, wherever possible, by a minimum 6m separation distance and / or a fire-resistant wall such as concrete panel or block walls and are emptied regularly to ensure a first in-first out turnaround of material.

The main stockpile located within the waste processing building is maintained to enable an efficient and fluid operation of waste processing, using a first in – first processed method to ensure good rotation of waste materials.

Stockpile Rotation

All waste stockpiles are managed to ensure that they are stored on site of the minimum amount of time. This is achieved by:

- Processing incoming material as soon as possible. The first in – first out approach is achieved by ensuring material is continuously processed and thereby reducing the amount of time material is stockpiled.
- Removing processed material from site as soon as possible. Again, a first in-first out approach is used for material transfer.

All waste stockpiles are continuously monitored by mobile plant operatives and checked by Site Management and Supervisors to ensure that the site complies with the rotation philosophy of first in – first out.

2.2.7 Waste Removal

No wastes shall remain unprocessed on the site for more than 48 hours.

All vehicles removing waste from the site will pass over the weighbridge where the load will be weighed and inspected before a waste transfer note is printed detailing all relevant data as shown below:

- Date and time of receipt of waste;

- Vehicle registration number;
- Name and address of customer / haulier;
- Waste type;
- Waste carriers registration number.

2.2.8 Plant Maintenance and Inspection

All fixed and mobile plant and equipment will be maintained in good working order and in accordance with the manufacturer's recommendations. Plant operators will be responsible for daily / weekly checks and maintenance of their machines, with any defects being reported to the Site Manager / Responsible Shift Supervisor immediately.

In the event that works are to be carried out on the plant, which cannot be moved to a safe place, then every effort will be made to carry out the works without the use of welding / braising equipment.

If this is not possible and 'hot work' is required in a vicinity of any waste or other combustible material, then the relevant Site Manager / Shift Supervisor must be informed prior to the work commencing. In such an instance the Company Permit-to-Work system will be used and relevant controls implemented.

In the event of a plant / machine breakdown, dependent on the equipment type, the facility can continue to operate as normal and in accordance with the requirements of the Environmental Permit by making use of other equipment or arranging short term replacement equipment to be brought to site.

Should plant / machine failure have a serious impact on the day-to-day operations of the site then a decision to either divert, reduce or temporarily suspend operations will be considered. In such circumstances the local Environment Agency officer will be notified if necessary.

3. Emissions and Monitoring

3.1 Transfers off-site

All site generated wastes, recovered materials via the recovery facility and waste bulked and transferred from the site is accompanied by a waste transfer note.

3.2 Emissions to Land, Air or Water

3.2.1 Potentially Polluting Leaks and Spillages

All vehicles and plant used on site shall be operated and maintained in such a way to minimise the likelihood of any potential leaks or spillages.

Any container used to hold waste, which is found to consist of, or contain, potentially polluting liquids, sludges or powders shall be:

- Loaded and unloaded in accordance with the handling procedures as specified in the Site Environmental Permit;
- Filled and emptied in accordance with the filling and emptying procedures as specified in the Site Environmental Permit;
- Clearly labelled regarding its contents, unless the contents are identifiable;
- Inspected and maintained in accordance with the maintenance schedules and procedures specified in the Site Environmental Permit;
- In the event of damage or deterioration to a container, a repair or replacement container will be immediately implemented.

In the event of a **minor** spill on site it will be dealt with by deploying spill kits, using absorbent materials on the affected area. The absorbents will then be placed into a suitable container and stored in the site quarantine area prior to being taken to a suitable licenced site for disposal.

Following a **major** spill any nearby surface water drains will be covered / bunded against and the flow regulator valve within the site drainage system will be closed off, preventing any contamination from entering the full retention interceptor and effectively sealing the site drainage system. The spillage shall be cleaned up immediately using absorbent materials which, in turn will be placed into a suitable container and stored as above.

3.2.2 Fire

All reasonable precautions will be taken to prevent the outbreak of fire leading to the likely release of fugitive emissions. The deposit of hot or burning waste will be treated as an emergency and dealt with

immediately in accordance with the site Environmental Accident Prevention and Management Plan ***(Appendix 3)***, Fire Prevention Plan ***(Appendix 4)*** and Emergency Evacuation Plan**.**

If required, the Fire Brigade and Environment Agency will be advised by the Site Manager and the incident recorded in the Site Diary.

3.2.3 Fire Water

In the event of a fire there is a potential that a large quantity of water may be used to supress or extinguish the situation. The main processing and storage areas of the site are made up of concrete floors and so the resulting run-off water from a fire would flood into the site surface water drainage system. Such water would likely contain a large quantity of particulate from the fire.

In such an event the site has the ability to block the site drainage system using a slide valve located before the oil retention interceptor, effectively sealing the site drainage system.

Following such incident, the Site will then make arrangements to have the fire water removed from the drainage system via an approved disposal method.

3.2.4 Transport of Mud and Other Detritus External to the Site Boundary

Good housekeeping practices are maintained at all times to ensure that the site is kept in a clean and tidy condition and to avoid the transport of mud and other detritus external to the site and surrounding areas.

Vehicle access to the Site is directly from the road outside (West Line Industrial Estate) which is of tarmac construction.

All vehicles are inspected for excess mud prior to leaving the site and, where necessary, cleaned off.

The Site also makes use of an internal road cleaning service to ensure that the roads both on and off site remain clean.

In the event that debris is generated from within the site it will be controlled by standard site management procedures, i.e. visual identification through the daily site inspection carried out by a competent person.

3.2.5 Litter

The site is subject to ongoing inspections during operational times. Litter and debris will be cleared as required.

The predominant waste stream accepted by the site is mixed construction and demolition waste, which is tipped and processed within the main processing building. Any subsequent mixed waste from the process which could generate airborne litter is retained and loaded-out from within the processing building.

All other wastes are stored within designated bays, inclusive of bay walls, to minimise wind disturbance and possible generation of airborne litter.

Any litter which does escape the operation and is arrested by the site boundary fence will be removed at the end of the working day in which it is discovered.

In the event of any spillages of waste from the site boundary and into the local environment, it will be the responsibility of the TCM to arrange for litter picking of the affected areas within the same working day. Any operation identified for the generation and escape of litter will be stopped, if required, until further measures can be taken.

In addition to the above, any outgoing wagons / trailer units and skips leaving the site when loaded with a waste material will be appropriately sealed / sheeted to prevent the escape of litter.

3.2.6 Control, Monitoring and Reporting of Dusts, Fibres and Particulates

All site operations will be carried out to the purpose of minimising the creation of dust.

All person(s) responsible for process activities on the site will actively monitor the dust emission from their operation. Site supervisors will also make active inspections on site dust levels.

Depositing of mixed wastes will be carried out within the main processing building which has an internal suppression system installed and regular inspections on the internal dust levels will be made.

<8mm fines, generated as a by-product of the mixed waste process, are delivered into an external bay consisting of 3 concrete block walls which act as a wind breaker, by a conveyor belt system. A rubber sock is fitted to the end of the conveyor belt to prevent dust generation through the depositing process and a suppression system has been installed around the bay to prevent dust emission.

The fixed processing plant within the main processing building is inclusive of 3 ‘windsfiter’ screens which are used to separate heavy wastes from lighter wastes. Such screens have been fully enclosed and are inclusive of a dust extraction system to prevent the escape of dusts, fibres and particulates from this process.

Dust from the extraction system is collected within enclosed units located external from the processing building. These units are regularly emptied and all collected dust is immediately disposed of.

Inert crushing will be carried out with the dust suppression hoses attached to the crusher. If the crushing activity begins to generate significant levels of airborne dust it will be halted immediately to allow for investigation.

If required, further control will be implemented prior to the re-instatement of the crushing activity.

Inert material stockpiles will be restricted in height to 8 metres, in line with site planning permission. Water suppression will be used on top of the stockpiles to prevent dust emission caused by wind or dry heat.

Vehicles used to transport potentially dusty materials from the site will be securely sheeted before leaving the site and, if necessary, the load may be dampened down using water hoses to further minimise the potential of dust emission.

Specific measures appropriate for individual circumstance will be deployed a necessary at the discretion of the Site Manager from the following;

- Regular clearance of site surface and roadway of any standing material to minimise dust generation;
- Periodic sweeping of external site surface with a mechanical road sweeper;
- Dampening down of the internal site surfaces i.e. operation of hoses when required.

3.2.7 Odour Control

All incoming wastes are subject to the waste acceptance procedure as detailed in 2.2.3. If any waste exhibiting offensive odour is brought to site it will be deposited in the waste quarantine area (within the retaining container) or rejected immediately and removed from site to a suitable location.

A documented check of the odour level on site will be carried out by the Site Manager and recorded within the site diary.

Should offensive odour be apparent on the site, or external complaints are received, the further action will be taken to improve site operations;

- Site Manager will investigate the source of the odour on site and carry out actions to rectify it.
- Site Manager will investigate other potential sources of the odour, exterior to the site and record in the site diary if identified.

If the above methods are not sufficient, alternative control methods will be employed, such as odour masking sprays.

3.2.8 Noise

Due to the location of the site, it is unlikely that the site operations (by their nature) will impact on the local environment.

All mixed waste will be tipped and processed with the main processing building which will dampen the noise from such activities.

All mobile plant and machinery are maintained to comply with current legislative requirements and the following measures will be implemented on site to guard against any noise generated from operating mobile plant, vehicles or machinery when outside of the processing building;

- All vehicles on site will be required to observe a 5mph speed limit;
- All equipment will be maintained in good mechanical order, inspected and serviced in accordance with the manufacture's instruction;
- Broadband reverse alarms are used to reduce travelling distance of noise from vehicles;

3.2.8.1 Noise Monitoring

The monitoring of noise generation and levels in general will be continuous throughout the daily operation of the facility. A competent person will act if any excessive noise is generated.

3.2.8.2 Noise Complaints

Complaints received regarding noise shall be recorded in line with the Company's complaints procedure together with a record of the likely cause noted at the time of the complaint. The complaint shall be investigated and a concluding updated noted on the complaint record.

A record of the complaint and investigation findings will also be made within the site diary.

3.2.9 Pests, Birds and Other Scavengers

Due to the category of waste permitted onto site, the presence of pests, vermin and birds is considered to be low risk.

To ensure that additional control is not required, daily inspections will be carried out by the Site Manager.

Should the level of risk to pest, vermin or birds increase, the TCM will be responsible for implementing additional controls which may include;

- Clearing of waste bays (internal or external);
- Use of pesticides;
- Use of bait boxes / bait traps;
- Employment of specialist pest controllers.

In addition, the regular turnaround of waste materials and ongoing housekeeping / cleaning regime is currently in place.

4. Information

4.1 Records

4.1.1 Waste Records

A daily record of waste and recyclables brought to and removed from the site will be maintained for further reporting requirements.

4.1.2 Site Diary

The site diary will keep record of the below on a daily basis;

- Staff present on site;
- Name of TCM and time of attendance;
- Plant maintenance and breakdown works;
- Site closure within nominal hours;
- Details of emergencies / accidents;
- Problems with deposited waste (odour, non-compliance etc.);
- Severe weather conditions;
- Complaints and actions taken;
- Environmental problems and remedial measures;
- Perimeter checks;
- Odour checks;
- Noise checks;
- Observation of pests e.g. flies, birds, etc.

The information will be available for inspection during operational hours by an authorised officer of the Environment Agency.

4.2 Reporting

4.2.1 A summary of the waste types and quantities accepted and removed from the site is generated for each quarter. It is submitted to the Environment Agency within one month of the end of the quarter, in the required format.

4.2.2 Environmental Agency Reporting Mechanism

Any incident(s) involving the following, where there is an immediate threat to the environment, will be reported to the Environment Agency as soon as is possible either through direct line to the local office or by using the national 24-hour contact number, when out of hours:

- Accidents;
- Incidents;

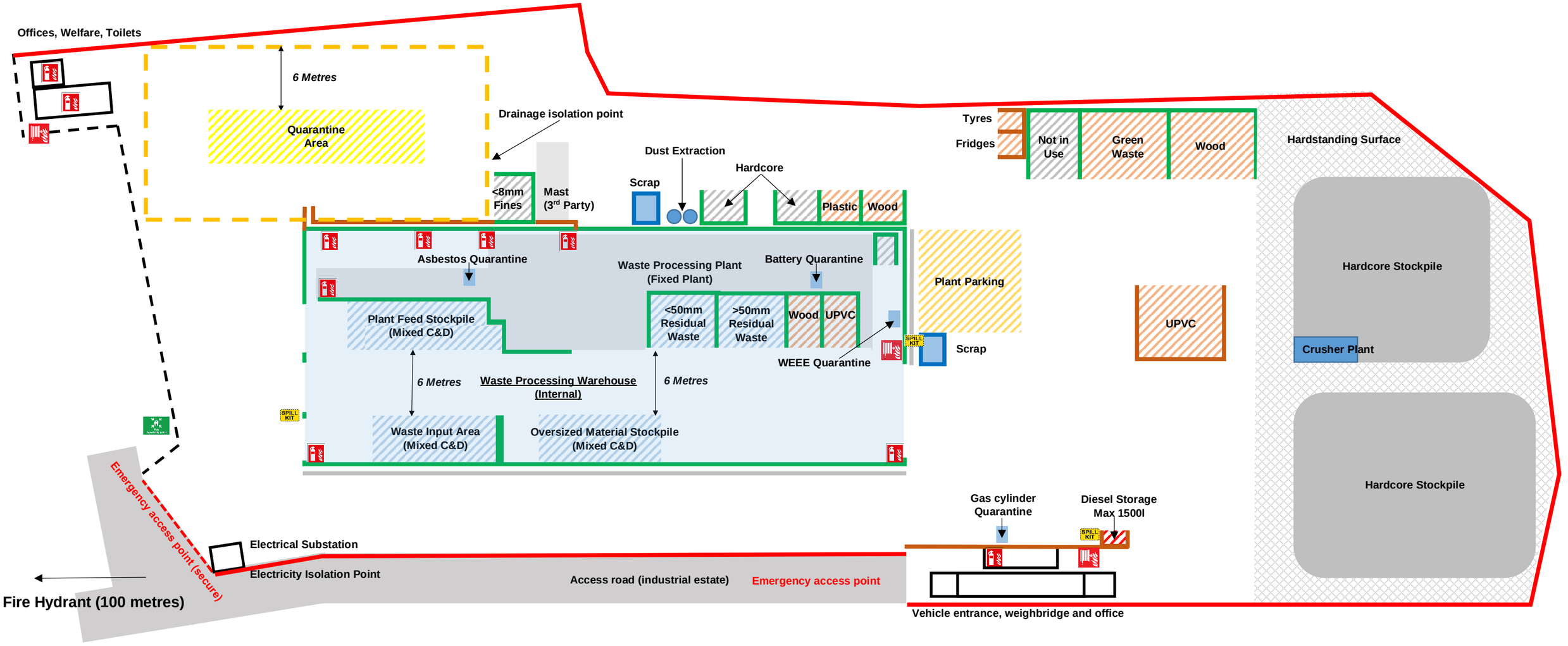
- Plant breakdowns and malfunction that could have an adverse effect on the environment or human health and could lead to a breach of EP conditions;
- Waste rejection;
- Any significant environmental effects including damage to any sensitive receptors and significant impact on properties.

Drawings

Drawing 1 – Site Layout Plan

Drawing 2 – Site Drainage Plan

Drawing 1 - Site Layout Plan

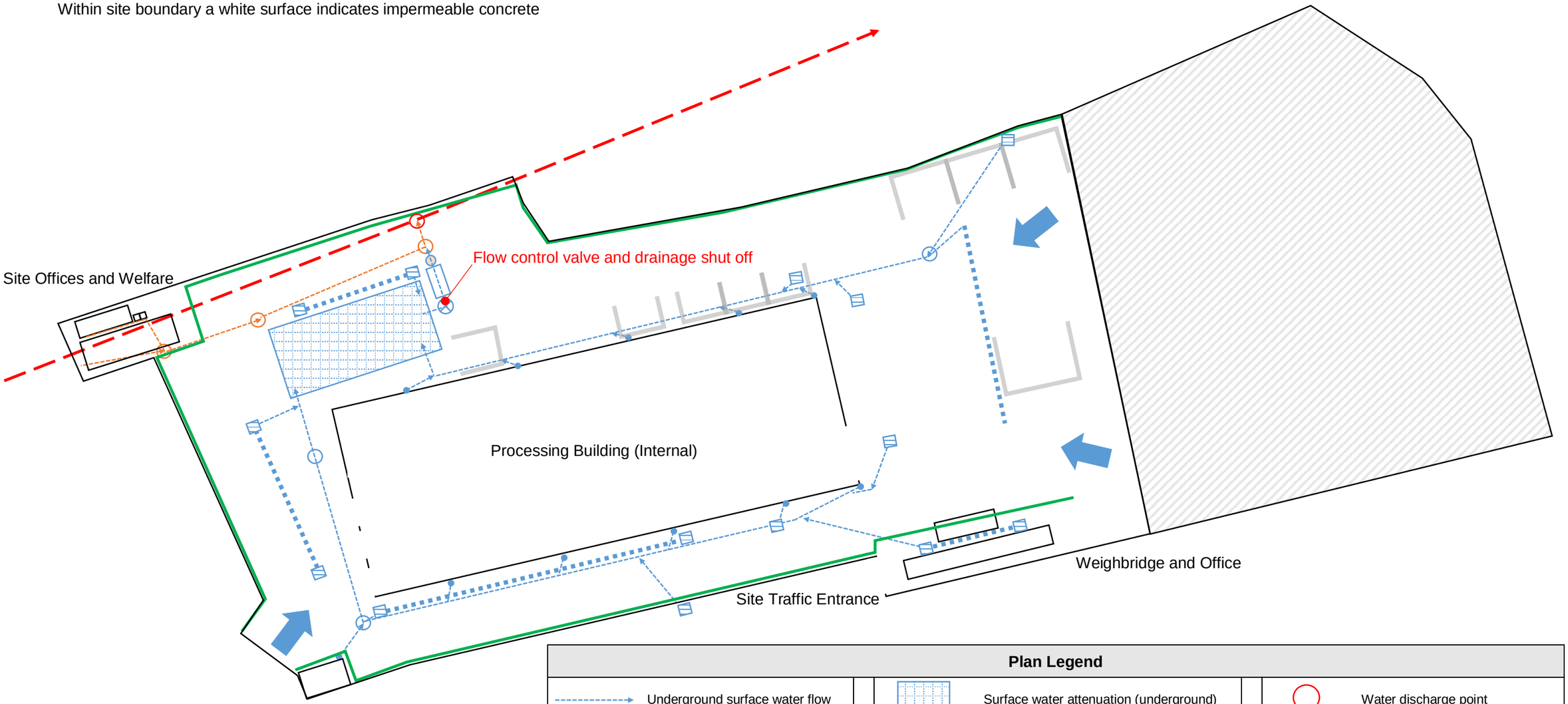


Site Layout Plan - KEY

Site Perimeter	Mixed Waste	Spill Kit Location
Concrete panel / block wall or bay	Segregated Waste	Fire Assembly Point Location
Concrete block / barrier demarcation	Inert Waste	
Impermeable concrete surface	Gasoil Storage	
Hard standing Surface	Fire Extinguisher Location	
Internal Area	Fire Hose Location	

Drainage / Containment Plan

Within site boundary a white surface indicates impermeable concrete



Plan Legend					
Underground surface water flow		Surface water attenuation (underground)		Water discharge point	
Surface water gulley		Settlement / flow control manhole (drainage shut-off)		Combined sewer flow	
Surface water hauraton gulley		Full retention oil interceptor		External bay / waste storage	
Surface water manhole		Sampling chamber		Curb line retention	
Surface water building downpipe		Foul water flow		Building / structure	
Direction of slope / fall		Foul water manhole		Permeable hard standing surface	

Appendix 1

BIRTLEY EMS-D1 Site Inspection Document

Appendix 2

BIRTLEY EMS 002 - Waste Acceptance, Rejection and Quarantine Procedure

Appendix 3

BIRTLEY EMS 003 - Accident Prevention and Management plan

Appendix 4

BIRTLEY EMS 004 - Fire Prevention Plan

Company / Site Name:			
Location of the Incident:			
Date and Time of the Incident:			
Incident Discovered by:			
Incident Reported to (TCM):			
Type of Incident:	☐ Major	☐ Minor	☐ Near Miss
Incident identified through:	☐ Operations	☐ Emergency	☐ Audit/Complaint
Nature of the Incident:	Water pollution	Noise pollution	Air pollution
	Ecological damage	Land contamination	Spill
	Waste associated	Inappropriate storage	Damage to facility
	Odour	Security breach	Fire
Incident Details: Indicate locations and quantities where applicable			

Cause of the Incident:		
Details of Affected Watercourse, **Drain or Sewer:**		
Details of Actions Taken **Immediately After the Incident:**		
Details of Further Actions **Needed:**		
Incident Further Reported to:	☐	Environment Agency (EA)
	☐	Water Authority
	☐	Local Authority
	☐	Fire Brigade
	☐	Other ……
Additional Comments:		

Witness Statement (Re-print multiple statements if needed)	
Name:	
Position:	
Phone Number:	
Address:	
Location of Witness at the Time of the Incident:	
Written Statement:	
Date Statement was Given:	
Witness Signature	
Corrective Action Record	
Interim Actions Taken	
Actions Taken by:	
Signed:	

Additional Required Actions	Responsibility	Priority	Progress

REMONDIS®

WORKING FOR THE FUTURE

BIRTLEY WASTE TRANSFER STATION

Recycled Aggregates - Factory Production Control (FPC)

Document Control

Document ID	QMS 001	**Prepared by**	Neil Cook
Document Title	Recycled aggregates – factory production control (FPC)	**Authorised by**	Remondis Management Team
Standard | Clause	ISO 9001:2015 | Clause 6 - Planning		

Version | Revision	Date of Inception	Next Review by	Status | Summary of Changes
1.0	06th January 2020	12 Months	Authorisation and inception
1.1	01st July 2021	12 Months	Full document review following changes to production methods
1.2	01st July 2022	12 Months	Full document review | Changes to company structure
1.3	01st July 2023	12 Months	Full document review | Update following purchase of new machinery | Permit variation update

Contents

1. Introduction

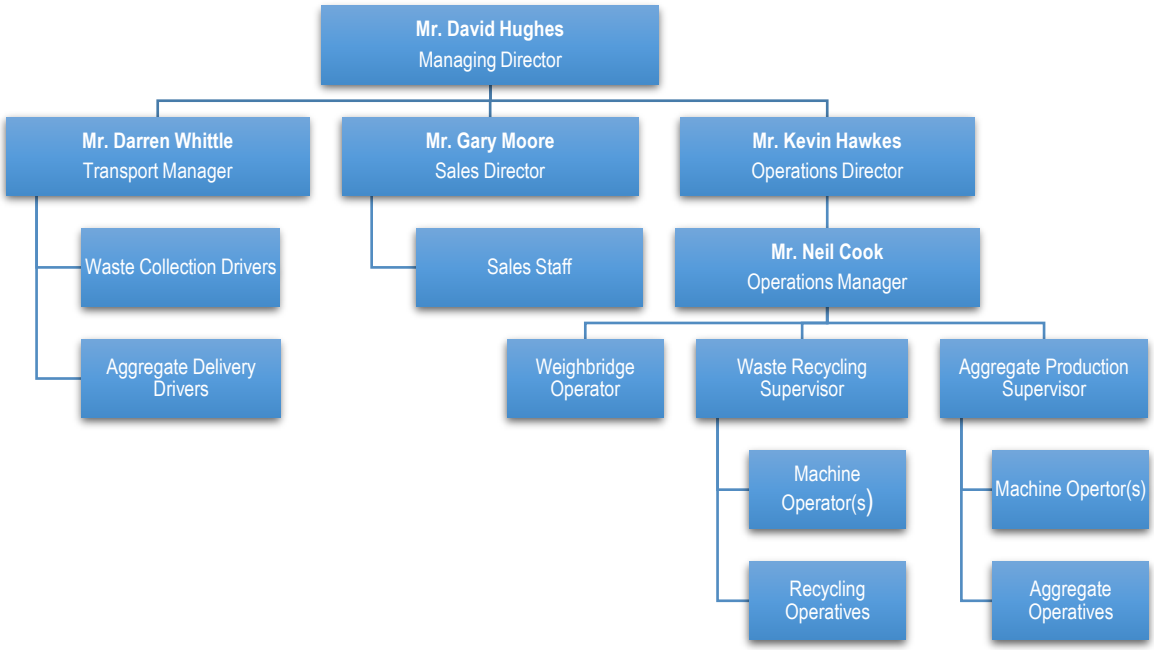
1.1 This Quality Manual defines the nature and scope of the production of aggregates by Remondis Ltd at Birtley Waste Recycling and Transfer Station (Site), West Line Industrial Estate, Birtley, County Durham.

1.2 Recycled aggregate products produced under this Quality Manual and that comply with the requirements of the appropriate European Standards will no longer be considered to be a waste and therefor do not have to be stored or handled under waste management regulation.

2. Staff and Resource Management and Responsibilities

Organisaitonal Structure

2.1 The organisational organogram provided below shows the management and operational structure within Remondis Ltd in relation to this Quality Manual.



Management Staff

2.2 Management staff are responsible for the defining and communication of a quality policy and related quality objectives. This requirement is met via certification under ISO 9001:2014 as achieved by Remondis Ltd.

2.3 Management staff are also responsible for reviewing this Quality Manual to ensure continuing effectiveness in meeting the requirements of this Quality Protocol.

2.4 Audits will be undertaken on a regular basis to ensure the implementation of the Quality Manual and compliance with its requirements. An audit checklist has been provided in Appendix 1.

Operational Staff

2.5 Members of operational staff will follow the operational procedures referenced in this Quality Manual and will be responsible for the day-to-day implementation of those procedures, under the direction of the above management.

Staff Training

2.6 New members of staff will complete a full company induction. On-site training will be provided, based upon employment specifications and in accordance with the training requirements and records as specified in the Site Environmental Management System. A copy of which is kept in the Site office.

Communication

2.7 A copy of this Quality Manual will be made available to all staff involved in its implementation. The Operations Manager will be responsible for ensuring that any operatives with relevant responsibilities are familiar with its requirements and are adequality trained. Training requirements and records are held within the Site Environmental Management System.

2.8 Communication will be encouraged and the Operations Manager will operate with an open-door policy so that staff can raise issues directly.

Resource Management (People)

2.9 The recruitment of staff will be the responsibility of the Operations Manager, working alongside the Operations Director. It will require direct approval from the Regional Director.

2.10 Once recruited, new staff members will complete a company induction. On the job training will be given, as required, and more formal training needs will be identified and recorded in the site Environmental Management System.

Resource Management (Suppliers)

2.11 Suppliers of waste are informed of the Remondis Ltd materials requirements via formal exchanges with the Sales Director and / or sales department. Such exchanges are documented.

2.12 Before waste materials are brought to Site, they are visually inspected against a list of European Waste Codes (EWC) by trained waste collection drivers to ensure that it is compliant with the waste acceptance criteria.

2.13 As waste materials arrive at Site, they are again visually inspected against a list of EWC by trained recycling and aggregate production machine operators and / or operatives.

2.14 The acceptance or rejection of materials is clearly communicated to the supplier by the use of Waste Transfer Notes (WTN) or Non-Conformance Reports (NCR) as required by a Waste Acceptance Procedure, which makes up part of the Site Environmental Management System.

2.15 In cases of waste rejection, contact will be made with the supplier by telephone or email to open a dialogue to establish reason for the rejection, the action needed to be taken and to avoid future rejection incidents.

2.16 Any suppliers bringing wastes to the Site must be a registered waste carrier. Remondis Ltd will carry out Duty of Care checks to ensure that these are in place and visits to bulk suppliers may be undertaken to check the origin of the material being accepted.

3. Method Statement of Production

Material Acceptance

3.1 Materials accepted for processing into a BS EN 16236:2018 compliant recycled aggregate products are classified as inert and only include the European Waste Catalogue codes shown below.

3.2 Remondis Ltd makes use of a strict waste acceptance, rejection and quarantine procedure to ensure compliance with the Site Environmental Permit.

3.3 Whilst other waste types are accepted onto the Site under the Site Environmental Permit, the waste acceptance procedure also ensures that only those wastes specified below will be used for the production of aggregates under this Quality Manual.

3.4 Waste from physical and chemical processing of non-metalliferous minerals.

Waste Type and Exclusions	Waste Code
Waste gravel and crushed rocks other than those mentioned in 01 04 07 May include excavation from mineral workings.	**01 04 08**
Waste sand and clays Must not include contaminated sand.	**01 04 09**

3.5 Waste from manufacture of glass and glass products.

Waste Type and Exclusions	Waste Code
Waste glass-based fibrous materials Allowed only if: • Wastes without organic binders	**10 11 03**

3.6 Packaging (including separately collected municipal packaging waste).

Waste Type and Exclusions	Waste Code
Glass packaging	**15 01 07**

3.7 Construction and demolition waste – concrete, bricks, tiles and ceramics.

Waste Type and Exclusions	Waste Code
Concrete Must not include concrete slurry.	**17 01 01**
Bricks	**17 01 02**
Tiles and ceramics	**17 01 03**

Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	**17 01 07**

3.8 Construction and demolition waste – wood, glass and plastic.

Waste Type and Exclusions	Waste Code
Glass Must not include fibreglass or glass fibre.	**17 02 02**

3.9 Construction and demolition waste – bituminous mixtures, coal tar and tarred products

Waste Type and Exclusions	Waste Code
Bituminous mixtures other than those mentioned in 17 03 01	**17 03 02**
Allowed only if: • Bituminous mixtures from the repair and refurbishment of the asphalt layers of roads and other paved areas (excluding bituminous mixtures containing coal tar and classified as waste code 17 03 01). • Must not include coal tar or tarred products. • Must not include freshly mixed bituminous mixtures.	

3.10 Construction and demolition waste – soil (inc excavated soil from contaminated sites), stones and dredging spoil

Waste Type and Exclusions	Waste Code
Soil and stones other than those mentioned in 17 05 03 Must not contain and contaminated soil or stone from contaminated sites.	**17 05 04**
Dredging spoil other than those mentioned in 17 05 05 Allowed only if: • Inert aggregate from dredgings. • Must not contain contaminated dredgings. • Must not contain fines.	**17 05 06**
Track ballast other than those mentioned in 17 05 07 Allowed only if: • Does not contain soil and stoned from contaminated sites.	**17 05 08**

3.11 Construction and demolition waste – other construction and demolition wastes

Waste Type and Exclusions	Waste Code
Mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	**17 09 04**
Allowed only if:	

- The waste is generated from utilities tenchings.
- The waste consists of sub-base aggregates i.e. granular material.
- The waste contains only materials that would be described by entries 17 01 01, 17 03 02 and 17 05 04 in this if the waste was not mixed.

3.12 Waste from mechanical treatment of waste not otherwise specified (for example sorting, crushing, compacting, pelletising).

Waste Type and Exclusions	Waste Code
Glass Does not include glass from cathode ray tubes.	**19 12 05**
Minerals (for example sand, stones) Must not contain contaminated concrete, bricks, tiles, sand, stone or other gypsum from recovered plasterboard.	**19 12 09**
Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11 Must not include fines from treatment of any non-hazardous waste. The waste contains only materials that would be described by entries 17 01 01, 17 03 02 and 17 05 04 if the waste was not mixed.	**19 12 12**

3.13 Municipal wastes (household waste and similar commercial, industrial and institutional waste) including separately collected fractions.

Waste Type and Exclusions	Waste Code
Glass Must not include fibreglass.	**20 01 02**
Garden or park wastes (including cemetery waste) – soil and stones Must not contain contaminated stones from garden or park waste.	**20 02 02**

3.14 The maximum permitted constituent of cohesive (e.g. clay and soil), metals, wood, plastic, rubber or gypsum plaster for the end-use product is 1% by mass.

3.15 The maximum permitted constituent of floating material for the end-use product is <10cm^3/kg unbound or <5cm^3/kg aggregates for concrete.

3.16 Further information is provided on the waste acceptance procedure in Sections 6 and 7 of this Quality Manual.

Recycling Processes and Manufactured Products

3.17 The recycling processes undertaken on the Site are described in Appendix 2, Description of Recycling Processes.

3.18 A list of recycled products manufactured from waste in accordance with this Quality Manual are provided in Appendix 3, Manufactured Products.

Facilities

3.19 The word 'facilities' applies to the general makeup of the site, for example the buildings, site boundaries and all physical items that are not moving machinery, plant or other vehicles.

3.20 Facilities need to be well maintained and in good working order to ensure that the staff can operate safely and efficiently in accordance with the Quality Manual. Refer to the Site Environmental Management System for procedures and records to be kept in regard to the maintenance of facilities.

Plant and Equipment

3.21 Remondis Ltd is responsible for the purchasing, maintenance, inspection and testing of all plant and equipment used in compliance with this Quality Manual. A Plant and Equipment Plan is used to demonstrate and explain the individual use of each item of plant or equipment in compliance with this Quality Manual. See Appendix 4, Plant and Equipment Plan.

Site Operations and Storage

3.22 Storage areas for all equipment and products are provided on Site. Storage areas ensure that equipment and product are protected from damage and deterioration and can be adequately maintained. Plans showing the storage and operational areas of the Site are provided in Appendix 5, Site Plan and Process Diagram.

4. Factory Production Control

4.1 This section describes the Factory Production Control (FPC) for Remondis Ltd which is implemented through the following sections of the Quality Manual.

Information

4.2 The FPC is defined in the Construction Products Directive (1993) as a control system to be introduced by the manufacturers to monitor their product and to ensure that the required product characteristics are achieved and maintained consistently by the output. Every aspect of this control system should be documented in a body of written policies and procedures.

4.3 The FPC for the production of aggregates is specified in each of the BS EN Standards relevant to aggregates, to ensure that they conform to the relevant requirements of the technical specifications themselves.

Implementation

4.4 The FPC is implemented through scheduled controls and tests on measuring equipment, raw materials and constituents, processes, machines and manufacturing equipment and finished products, including material properties in products. Most importantly, the system provides for conformity assessment and for the management of non-conforming products.

4.5 Each BS EN Standard on Aggregates describes the FPC and its minimum requirements in terms of;

- **Organisation:** responsibilities and management of the FPC;
- **Control procedures:** manuals on procedures, documents and data control;
- **Management of production:** required set of procedures which constitute the FPC (identification and control of materials and any hazardous material content, control of storage and stock conditions, traceability of product throughout the process);
- **Inspection and testing:** testing equipment, procedures and frequencies*;
- **Records required;**
- **Control of non-conforming products:** actions on non-conforming products and corrective actions to avoid replication;
- **Handling, storage and conditioning in production areas:** arrangements to be taken to ensure maintenance of quality during handling and storage;
- **Transport and packaging:** responsibilities of the manufacturer and actions to avoid contamination of the product during those phases; and
- **Training of personnel:** procedures to ensure appropriate training of personnel involved in the FPC.

*Obligatory minimum test frequencies, characteristics and standards (including CE marking) are different for each aggregate type.

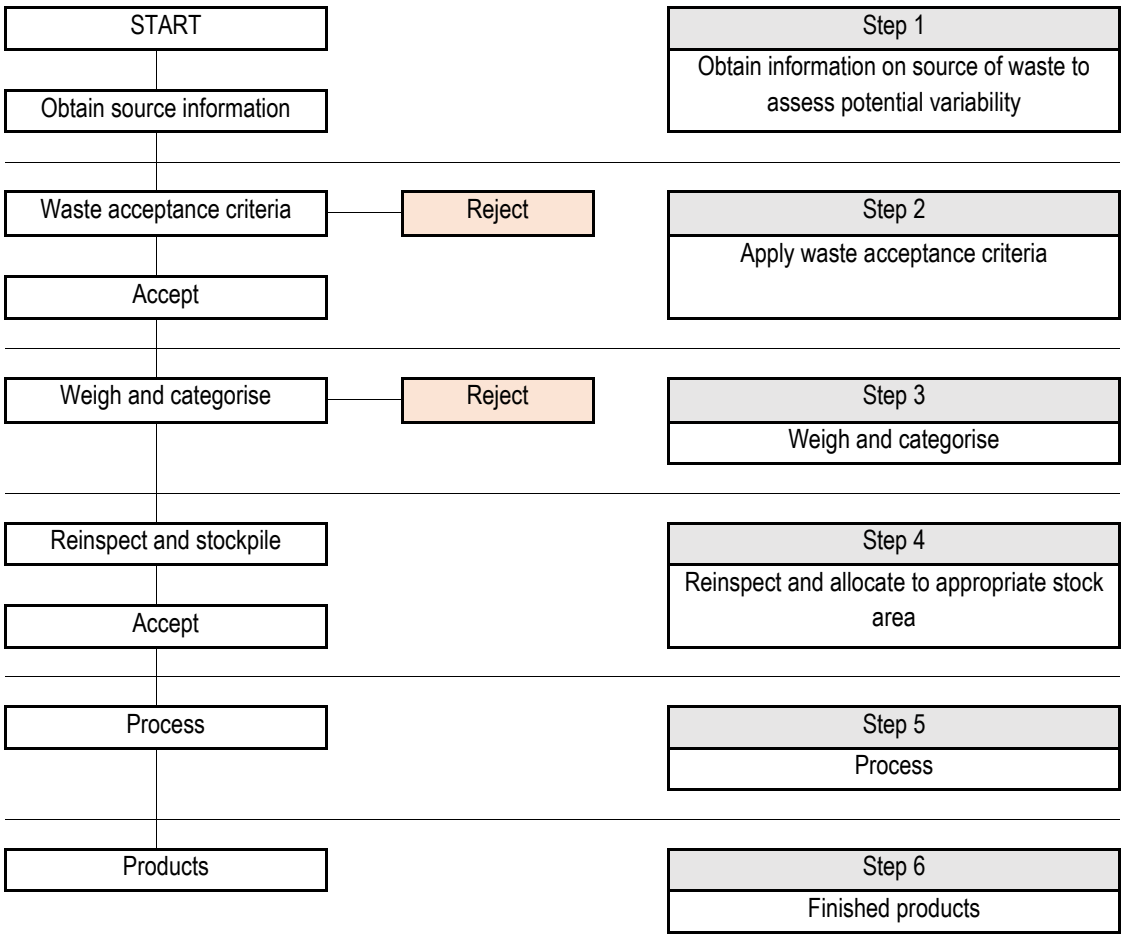
Relevant Standards Containing Specifications for the FPC

Product Categories	BS EN Standard
General Fill	BS EN 13243:2002 Aggregates for unbound and hydraulically bound materials. and, where relevant, BS EN 13285. Unbound mixtures – Specifications.
Capping	
Sub-base	
Aggregates for Pipe Bedding	

5. Method Statement of Production and the Factory Production Control

5.1 The flowchart below identifies the implementation of the MSP and FPC and their principles as they apply to the manufacture of aggregates from waste at the Site by Remondis Ltd. The following sections of the Quality Manual contain more detailed descriptions of the process used.

5.2 **Figure 1: MSP and FPC Manufacture Process**



6. Incoming Waste Materials

6.1 This section refers to the 'Obtain source information' stage shown in **Figure 1: MSP and FPC Manufacture Process.**

Information to be obtained

6.2 The table below shows the information that should be obtained and recorded in relation to the waste accepted for processing under this Quality Manual.

Information to be Obtained	Where recorded / held
Regulator Information:	
Internal waste carrier licence (Remondis Ltd)	Duty of Care records / Head office
Supplier waste licence or registration of exemption (if relevant)	Duty of Care records / Head office
Supplier waste carrier / waste broker registration details	Duty of Care records / Head office
FPC Information:	
Materials details – E.g. waste type by EWC	WTN / Head office
Location of Origin	WTN / Head office
Supplier / demolition or building contractor details	WTN / Head office
Date of supply / demolition / arising / production	WTN / Head office

6.3 Remondis Ltd will obtain regulatory information from the waste transfer notes (WTN) that must accompany each load of waste delivered (either internal collection or 3rd party tipping).

6.4 FPC information is obtained from the suppliers. This will be obtained once per supply (where supply identifies the whole batch of a material originated in a place that is delivered / collected in a number of consignments).

Responsibilities

6.5 The Site Operations Manager is responsible for obtaining and maintaining a record of all regulatory FPC information. They are also responsible for conducting audits to ensure that all regulatory and FPC information is being maintained in accordance with this Quality Manual.

Records to be maintained

6.6 A full description of all records to be maintained in accordance with this Quality Manual is included in Appendix 6, Records to be Maintained.

7. Receipt of Waste Materials

7.1 This section refers to the 'Acceptance Criteria' stage shown in **Figure 1: MSP and FPC Manufacture Process** and describes the acceptance of waste materials at the Remondis Ltd Birtley Site.

7.2 Remondis Ltd specify the criteria and the methods applied to ensure regulatory compliance and compliance with the FPC. In particular:

- Regulations on Waste: Duty of Care; requires that the waste we receive has a traceable owner and origin and it is transported by a certified authority.
- Aggregates Standard: the FPC requires that you operate a control on your materials and any dangerous substances that they may contain.

Procedures for the receipt of waste materials

7.3 Procedures for the receipt / rejection of waste materials are implemented through the Site Environmental Management System and are in accordance with the above requirements, see Site Environmental Management System, EMS 002 Waste Acceptance, Rejection and Quarantine Procedure.

Responsibilities

7.4 This section describes who is responsible for implementing the procedures and taking decisions on the receipt of waste materials.

- Collecting and inspecting the load and accompanying documentation will be the responsibility of the Remondis Ltd transport department, initially waste collection. Drivers will bring any indication of a non-conformance to the attention of the Transport Manager as soon as it is identified. **ANY** driver is authorised to bring **ANY** non-conformance, or indication of non-conformance, to the attention of the Transport Manager at any time.

- Receiving and inspecting the load and accompanying documents will be the responsibility of the Weighbridge Operator initially and other Site Operatives during the tipping inspections. They will bring any indication of a non-conformance to the Site Operations Manager as soon as it is identified. **ANY** site member is authorised to bring **ANY** non-conformance, or indication of non-conformance, to the attention of the Site Operations Manager at any time.

- Ultimately, responsibility for accepting or rejecting the load lies with the Site Operations Manager and must be recorded appropriately.

Records to be maintained

7.5 A full description of all records to be maintained is at Appendix 6, Records to be maintained.

8. Weighing and Categorising

8.1 This section refers to the 'Weigh and Categorise' stage shown in **Figure 1: MSP and FPC Manufacture Process**.

8.2 This section describes the categorisation of waste materials at the Site and specifies the steps taken when waste is accepted, before it is stockpiled ready to be processed. This FPC requires materials to be put into stock in a controlled manner with and identifiable location.

Procedure for weighing and categorising of waste

8.3 Procedures for the weighing and categorisation of waste materials that are accepted onto the Site are implemented through the Site Environmental Management System and are in accordance with the above requirements, see Site Environmental Management System, EMS 002 Waste Acceptance, Rejection and Quarantine Procedure.

8.4 Where a load is acceptable as a direct input into this Quality Manual, it will be categorised as such and sent directly to the aggregate production feed stockpile.

8.5 Where a load is acceptable by EWC but may not meet the restrictions of the input material due to contamination levels (i.e. 17 09 04 Mixed Construction and Demolition Waste that **does not** contain only materials that would be described as 17 01 01, 17 03 02 and 17 05 04, but does contain predominantly those materials), the load will be submitted to pre-treatment within the waste processing building where it will undergo a separation process (mechanical and manual) in order to remove the non-compliant and recover the compliant materials.

8.6 Recovered compliant materials will then be categorised as input materials into this Quality Manual and added to the aggregate production feed stockpile.

8.7 EWC that are not compliant with this Quality Manual will not be used.

Responsibilities

8.8 This section describes who is responsible from implementing the procedures and taking decisions on the weighing and categorisation of waste materials.

8.9 The Weighbridge Operator is initially responsible for weighing and categorising the load in acceptance at the weighbridge. If there is any doubt they are to contact the Site Operations Manager for advice.

Records to be maintained

8.10 A full description of all records to be maintained is at Appendix 6, Records to be maintained.

9. Re-Inspecting and Stockpiling

9.1 This section refers to the 'Re-inspecting and Stockpiling' stage shown in **Figure 1: MSP and FPC Manufacture Process**.

9.2 This section describes the stockpiling of waste materials at the Site and specifies the steps taken when the waste is about to be stockpiled prior to processing into an aggregate product. This FPC requires material to be put into stock in a controlled manner with an identifiable location.

Procedure for re-inspecting and stockpiling waste

9.3 Procedures for the re-inspecting and categorising of waste materials that are accepted onto Site are implemented through the Site Environmental Management System and are in accordance with the above requirements, see Site Environmental Management System, EMS 001 Site Working Plan.

9.4 In accordance with the FPC requirements Appendix 5, Site Plan and Process Diagram, provides identification of different feed stock materials.

9.5 Remondis Ltd make a further inspection of each load during tipping to confirm acceptance, as contamination by way of non-conforming waste may be hidden within the bulk of the load. During tipping, Remondis operational staff will check the load to confirm initial categorisation by the weighbridge operator at the weighbridge, against the acceptance criteria.

9.6 If the load is acceptable, it will be added to the relevant stockpile of feedstock by a machine operator.

9.7 If the load does not conform to an acceptance criteria, the waste will be re-loaded and the waste rejection procedure will be implemented.

9.8 A quarantine area has been provided for the event that rejected or suspected loads cannot be reallocated to a different site process or immediately removed from site.

9.9 Remondis Ltd further clean all direct feedstock materials before the material is added to the aggregate production feed stockpile. Staff manually remove any identifiable non-compliant materials; such as wood, plastic and metals. Remondis Ltd provide containers for such removed contaminants to aid further recycling and to prevent re-contamination into the aggregate production.

Responsibilities

9.10 See below table for roles and responsibilities of this procedure;

Task	Responsibility
Load inspection during tipping	Site Operative / Machine Operator
Confirming categorisation	Site Operations Manager
Accepting or rejecting the load	Site Operations Manager
Recording details of the load	Weighbridge Operator
Cleaning the load (if applicable)	Site Operative
Adding approved load into relevant stockpile	Site Machine Operator

Records to be maintained

9.11 A full description of all records to be maintained is at Appendix 6, Records to be maintained.

10. Production

10.1 This section refers to the 'process' stage shown in **Figure 1: MSP and FPC Manufacture Process**.

10.2 This section describes the production stage, from obtaining feedstock from the relevant stockpiles and ensuring that all equipment, plant and other vehicles are performing as expected. This FPC requires that Remondis Ltd have defined all input materials, processes and products.

10.3 Remondis Ltd have set out the frequency and nature of testing / inspecting on all input materials, equipment and products in the process control documentation, including provisions for:

- Stocked material being checked to ensure that it has not deteriorated during storage.
- Equipment being calibrated and properly used.
- Non-conforming products being properly managed and recorded.

Method Statement of Production

10.4 Refer to Section 3 of this Quality Manual for the Method Statement of Production.

Process Control

10.5 Procedures controlling the stockpiled materials are implemented via the Site Environmental Management System. These procedures ensure that feedstock materials are suitable for processing into a BS compliant aggregate product.

10.6 Materials which are not suitable for immediate aggregate processing (too wet / mixed with other materials) may be discarded from the process or further treated, prior to aggregate processing, into a recovered product compliant with this Quality Manual.

10.7 Any residual or other contravening materials (i.e. paper, wood and plastic) are removed, by hand, from the aggregate processing stockpiles and re-allocated to a separate site process.

10.8 **Aggregate Production Input Materials –** As a minimum Remondis Ltd will ensure that:

- Stockpiled material is controlled before being fed into the aggregate production process, to verify that it has not degraded during storage (e.g. is too wet because it has been exposed to rain or has been mixed with other material).
- The material is still acceptable (based on the above controls).
- Procedures for dealing with non-conforming input materials are in place and an accurate record is being kept (e.g. leave to dry or submit to pre-treatment, divert to other production, quarantine and send back to supplier).
- The right material is being fed to the right process at the right rate.
- An internal system for keeping track of input material is kept and that such identification information is passed on to the next stage.

10.9 **Equipment** – Control procedures are in place to ensure that:

- Remondis Ltd are using the right equipment.
- The equipment is calibrated, where necessary.
- The equipment is performing as expected.
- Action is taken on any equipment performance not meeting expectations.

Responsibilities

10.10 See below table for roles and responsibilities of this procedure;

Task	Responsibility
Ensuring that the method of production is followed	Site Operations Manager
Controlling the input materials, feed and production equipment	
Managing non-conformities	

Records to be maintained

10.11 A full description of all records to be maintained is at Appendix 6, Records to be maintained.

11. Finished Products

11.1 This section refers to the 'Products' stage shown in **Figure 1: MSP and FPC Manufacture Process**.

11.2 This section describes the control and management of the incoming feedstock and finished products, from testing of their characteristics to stockpiling. This FPC requires that:

11.2.1 Remondis Ltd sets out the frequency and nature of testing / inspection of the input materials, equipment and products in the process control document, including provisions for:

11.2.1.1 Products being tested for their properties, under the conditions set by the relevant European Standard and inspection regimes are in place for all materials as defined in the below sub-section 'Process Control'.

11.2.1.2 Non-conforming products being properly identified and recorded.

11.2.1.3 Products being identifiable up to the point of sale as regard source, type and recording the results of the Daily Aggregate Process Control Document, included in Appendix 7.

Process Control

11.3 Testing is arranged by Remondis Ltd on incoming waste materials (see Section 6 and 7) and finished products.

11.4 All outgoing products are sampled and tested in accordance with the sampling procedure and finished product testing regime, See Appendix 8, Sampling Procedure and Appendix 9 Finished Product Testing Regime and Limiting Values.

11.5 A departure from the Finished Product Testing Regime is acceptable on the basis of:

- The large number of consecutive test passes for the product in question;
- Remondis Ltd administers a quality management system with exceptional measures for surveillance and monitoring of the product process;
- Sources of high conformity.

Non-Conformities

11.6 In the case of products failing to conform to the required standards, this FPC required that Remondis Ltd provide for product re-processing, diversion to another application for which the non-conforming product is suitable, or complete rejection. A procedure to follow in the case of non-conforming products is provided in Appendix 10.

11.7 Details on the non-conforming products and remedial actions shall be recorded by the Site Operations Manager on a non-conforming product form, see Appendix 11, Non-Conforming Product Form, for further investigation and, if necessary, corrective action.

11.8 If there is a complaint from a customer regarding the quality of the product then the complaint form, included within the Environmental Management System, will be used to record the occurrence and the resulting investigation and remedial actions.

Responsibilities

11.9 See below table for roles and responsibilities of this procedure;

Task	Responsibility
Controlling products and categorising them according to the relevant European Standards and specifications.	Site Operations Manager
Managing all non-conformities / rejections and general complaints.	

Records to be maintained

11.10 A full description of all records to be maintained is at Appendix 6, Records to be maintained.

12. Supplementary Information

12.1 This section contains examples of the paperwork used and other information which may be used as a reference to the operations undertaken with regard to the production of recycled aggregates on the Site.

Waste Transfer Notes

12.2 These notes are submitted to the weighbridge operator as appropriate to ensure the 'chain of custody' of all waste entering the recycling facility.

Weighbridge Tickets

12.3 These tickets display data assessed at the weighbridge, with specific addresses, date, time, gross, net and tare weights, vehicle, waste description and EWC information.

12.4 In relation to exported aggregate the weighbridge tickets will not display EWC information and will display a Remondis Ltd quality assurance statement.

Sales Invoices

12.5 These invoices display address, invoice and account number, material description, quantity, unit prices, VAT and totals information.

13. Documentation

13.1 Copies of documentation for the Site is included in Appendix 12, Permits.

Appendix 1 Audit Checklist for an Aggregate Producer

FPC QC	Audit Question	Y	N	N/A	Comments
3.4	**Acceptance of Incoming Waste**				
3.4.1	Does the recycling facility have the required environmental permit / waste management licence / exemption?	☐	☐	☐	
Note:	*Any facility handling waste must comply with the relevant regulatory requirements and the operator must be able to produce the relevant paperwork. This can be checked with the EA.*				
3.4.1	If the producer transports waste, do they have a certificate of registration as a waste carrier?	☐	☐	☐	
Note:	*Only applies to producers who transport their own waste to / from the facility or any other facility.*				
3.4.1	Does the producer have site / location specific Acceptance Criteria for incoming waste?	☐	☐	☐	
Note:	*List of waste or European Waste Code classifications must be used for consistency with the Waste Transfer Notes.*				
3.4.2	Do the Acceptance Criteria conform to the requirements of the environmental permit / licence / exemption of the site and the requirements of the Quality Protocol?	☐	☐	☐	
Note:	*Only wastes that can meet the definition of inert waste in the Remondis Quality Protocol can be accepted. It is particularly important the hazardous wastes such as asbestos are not accepted. If the facility is receiving material from a Waste Transfer Station or Material Processing Facility, it is important that only the inert fraction is transferred to the aggregate processing area.*				
3.4.4 3.7.1	Are waste input records kept for the statutory period?	☐	☐	☐	
Note:	*A record of each load received and accepted must be kept. Waste transfer Notes (WTN) must be kept for at least 2 years. WTNs must also be used for all residual waste leaving the site.*				
3.4.1	Does the Acceptance Criteria include a description of the method of acceptance?	☐	☐	☐	
Note:	*Are roles and responsibilities of staff clearly set-out?*				
3.4.3	Are incoming loads visually inspected at the weighbridge?	☐	☐	☐	
Note:	*The material in the incoming vehicle must conform to the description on the Waste Transfer Note and must be among those listed as acceptable in the acceptance criteria.*				

3.4.3	Are incoming loads checked after tipping to confirm that the materials are as described on the Waste Transfer Note?	☐	☐	☐	
Note:	*Contaminated material may be hidden beneath the surface so the material should be inspected at tipping to ensure that the whole load complies with the acceptance criteria.*				
3.4.3	Are procedures for non-compliant incoming wastes adequate?	☐	☐	☐	
Note:	*Procedures for non-conforming incoming waste include rejection of loads, quarantine or disposal. Roles and responsibilities of staff should be clearly set-out. It is particularly important that hazardous materials such as asbestos and contaminated soils are detected and dealt with at this stage, or large volumes of products may become contaminated.*				
3.4.3	Are non-conforming wastes dealt with in accordance with the procedures?	☐	☐	☐	
Note:	*The producer should keep records detailing how they have dealt with non-conforming waste.*				
3.4.3	Has an area been clearly set aside and clearly marked for non-conforming waste to be quarantined pending removal?	☐	☐	☐	
3.4.3	Are site staff aware of the procedures for acceptance of waste and dealing with non-compliant waste?	☐	☐	☐	
Note:	*This should be established by talking directly to the relevant operatives on site. Training should also be available.*				
3.5	Are acceptable incoming wastes assigned to clearly marked stockpiles, separate from the product stockpiles?	☐	☐	☐	
Note:	*It is good practice to assign different incoming wastes to different stockpiles. E.g. Single stream inert wastes separate from mixed construction and demolition waste, to enable maximum value to be obtained during the production process.*				
3.5	**Production Process**				
3.5	Is the production process adequately described?	☐	☐	☐	
Note:	*This must be set out in the Factory Production Manual and may be in the form of a flowchart. Processes will generally consist of crushing / screening and include methods for separation of contaminants e.g. magnets, washing or air-blowing.*				
3.2	Are the products clearly defined?	☐	☐	☐	
Note:	*The products will generally be defined in the Specification for Highway Works of the Specification for*				

	the Reinstatement of Opening in Highways. The FPC / Quality Manual should clearly state what the product is. E.g. "Type 1 unbound subbase mixture to Clause 803 of the Specification for Highway Works".				
3.5	Are the materials being processing in accordance with the procedures?	☐	☐	☐	
3.6.1	Are visual checks being carried out at all stages of the process?	☐	☐	☐	
Note:	*Visual quality checks should be carried out at all stages to ensure that there are no obvious problems occurring in the process.*				
-	Is the plant adequately maintained?	☐	☐	☐	
Note:	*Maintenance records and calibration certificates (where required) should be available to demonstrate that the plant is being adequately maintained.*				
-	Are staff adequately trained to operate the plant?	☐	☐	☐	
Note:	*Training records should be available and site staff should be interviewed.*				
-	Are products stored in accordance with the requirements of BS EN 13242?	☐	☐	☐	
Note:	*Products should be stored in separate stockpiles, clearly marked, with no overlap with other products or feedstock.*				
3.8	Are the products labelled in accordance with the requirements of BS EN 13242 and the Quality Protocol?	☐	☐	☐	
Note:	*Delivery documentation shall state that the product was produced under the Remondis Quality protocol and should include specification of the product.*				
3.6 & 3.7	**Product Name**				
3.6.1	Has the producer defined what testing to undertake, and how often, for the product?	☐	☐	☐	
Note:	*Any material produced to a Quality Plan must have a defined sampling and testing procedure and testing frequency.*				
3.3 3.6.1	Does the testing plan include the requirements of the specification of the product?	☐	☐	☐	
Note:	*Aggregates produced to BS EN 13242 must be tested to demonstrate compliance. The relevant specifications should be available so that test requirements can be established.*				
3.6.2	Is the sampling of the products for the testing carried out in accordance with BS EN 13242?	☐	☐	☐	
Note:	*It is important that representative samples are taken. This is often done by the testing company. Sample taking should be witnessed if possible.*				

-	Do the testing laboratories have UKAS accreditation for the relevant tests?	☐	☐	☐	
Note:	*All testing laboratories must have current UKAS accreditation for the relevant tests.*				
3.6.2	Do the test records match the requirements for frequency testing set out in BS EN 13242?	☐	☐	☐	
Note:	*The frequency of testing is related to periods of production. E.g. grading should be carried out once every week of production.*				
3.7.1	Are limiting values for the product presented along with the test results?	☐	☐	☐	
Note:	*The relevant limiting values should be included with the test report so that it is clear whether the product is acceptable.*				
3.6 **3.7.2**	Are test results summarised over time for each test and compared to limiting values?	☐	☐	☐	
Note:	*It is important to establish a history of test results so that the consistency of the product can be demonstrated.*				
3.7.2	Are test records kept for a minimum of two years?	☐	☐	☐	
Note:	*The length of time for which test records should be kept is not prescribed in BS EN 13242. Two years has been taken as a suitable period and the same as that required by legislation for Waste Transfer Notes*				
3.4.3	Are there procedures for dealing with non-conforming products?	☐	☐	☐	
Note:	*Non-compliant materials can either be reprocessed to be acceptable for the intended application, reclassified to an application for which they are acceptable or disposed of, depending on the nature of the non-compliance.*				
-	Has an area been set aside and clearly marked for non-compliant products to be quarantined pending reprocessing, reclassification or disposal?	☐	☐	☐	
3.4.3	Are non-conforming products dealt with in accordance with the procedures?	☐	☐	☐	
Note:	*The producer must demonstrate that non-compliant products are dealt with in accordance with the procedures. The producer should maintain records of actions taken to deal with non-conforming products.*				
-	Are the cases of non-conforming products established and are measures put in place to correct them?	☐	☐	☐	
Note:	*Non-conforming products may be caused by a number of factors, including faulty equipment or acceptance of unsuitable or contaminated material. It is important to establish the cause of a non-conforming product and take action to prevent recurrence.*				

Appendix 2 Description of the Recycling and Crushing Process

Initial Screening / Waste Separation / Contaminant Removal

- **Equipment Used –** Terex Waste Handler (Selector Grab Attachment) | C&D Waste Recycling Plant | Sizing Screen | Air Blower | Magnet | QC | Loading Shovel

- **Description of the process –** Inert and / or construction waste which is not immediately suitable as a direct input into the aggregate production process is stockpiled separately, within the waste processing building, for waste separation.

  The Terex feeds the material into the C&D Waste Recycling Plant where non-suitable contaminants are removed from the aggregate target material via sizing screen (fines screened off), an air blower, a magnet and manual quality control.
  - Non-aggregate materials removed and rejected from process;
  - <8mm fines removed and rejected from process;
  - >50mm separated aggregates moved to **Crushing Process** by Case Loading Shovel**;**
  - <50mm separated aggregates moved to **Secondary Screening Process** by Case Loading Shovel**.**

Secondary Screening / Waste Separation / Contaminant Removal

- **Equipment Used –** Extec E7 Screen | Washbear Waste Separation Plant | Hyundai 360 Excavator (Bucket Attachment) | Hitachi Wheeled Loading Shovel

- **Description of the process -** <50mm aggregates from the **initial screening** process is stockpiled separately for secondary separation and screening.

  A Hyundai 360 Excavator feeds the material into the E7 screen where any <10mm fines are screened off, rejected and removed from the process. The E7 feeds directly into the Washbear Plant, which removes any floating particles.
  - <10mm fines removed and rejected from the process;
  - Floating particles (non-aggregate material) removed and rejected from the process;
  - <50mm separated aggregates moved to the **Crushing Process** by Hitachi Loading Shovel.

Crushing Process

- **Equipment Used –** McCloskey J45 Jaw Crusher | Overband Magnet | Hitachi Wheeled Loading Shovel | QC

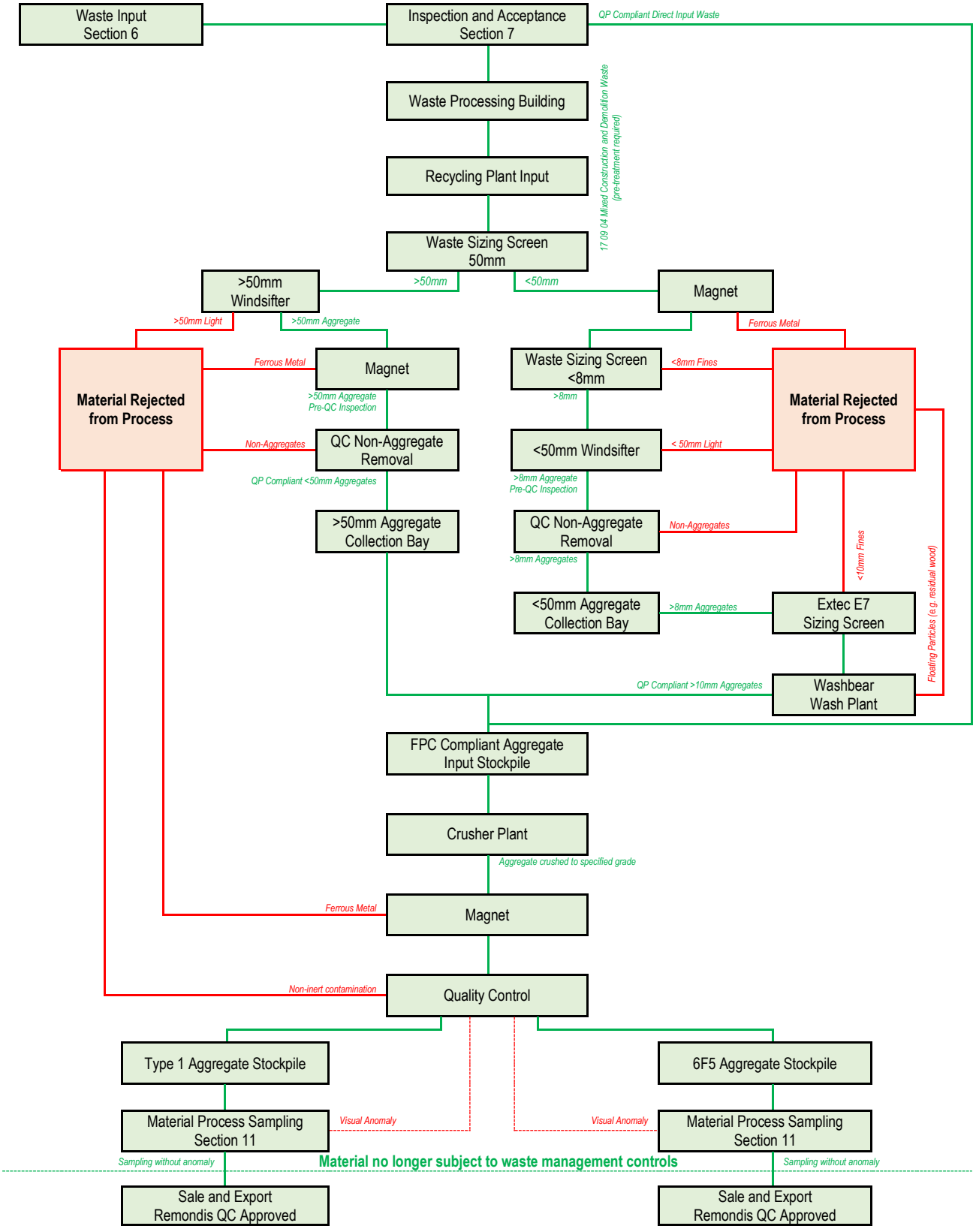
- **Description of the process –** Inert and construction waste which is suitable as a direct input into the aggregate production process is stockpiled alongside reprocessed (Now QP compliant) aggregate waste ready for the crushing process. Quality control of the crusher process input material is carried out and any non-conforming materials removed.

  The Hitachi Loading Shovel feeds a mixture of the waste(s) (needed for grading purposes) into the Jaw Crusher, which crushes the aggregate materials to a size required for a manufactured product. Upon discharge from the crusher plant,

an overband magnet removes and ferrous metals from the crushed aggregate and a final QC station will remove any residual non-aggregate products.

- Non-aggregate materials removed and rejected from process;
- Crushed aggregate material moved to relevant storage stockpile to await sampling, sale and export.

Flowchart of the Recycling and Crushing Process



Appendix 3 Manufactured Products

Product name: Type 1 Granular Sub-base

Product description: Type 1 Unbound mixtures to Clause 803 of the specification for Highway Works – Recycled Aggregates.

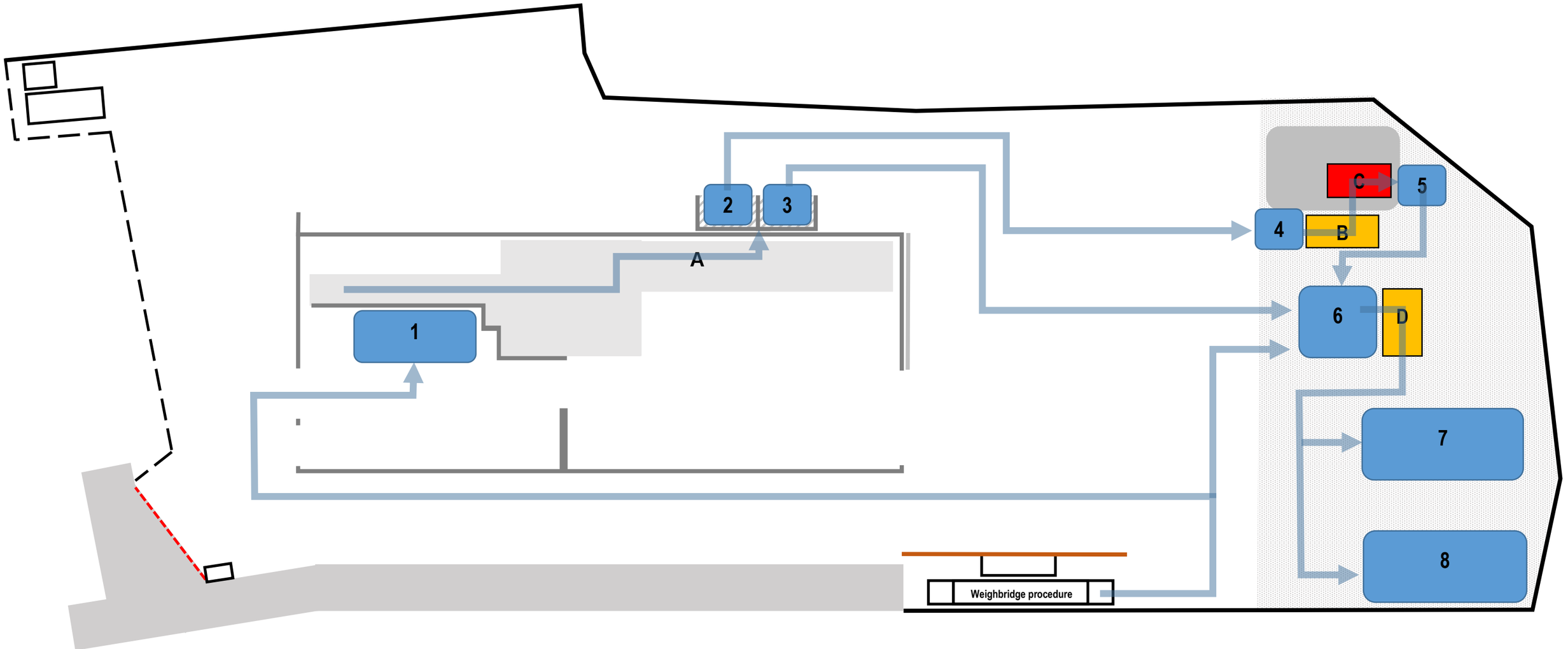
Product name: Recycled 6F5 Capping

Product description: Class 6F5 Selected granular materials (coarse grading) in accordance with table 6/1 of the Specification for Highway Works – Recycled Aggregates

Appendix 4 Plant and Equipment Plan

Item	Serial Number	Function	Service Intervals	Lubrication and inspection intervals	Comments
Kiverco Plant	Various	Waste Recycling / Separation Plant	Various	Daily	
Terex THW 220	220410 / 5367	Waste Handler	500 Hours	Daily	LOLER Tested
Case 721G	NZHE15811	Loading Shovel	500 Hours	Daily	LOLER Tested
Hitachi ZW 180	HFLPD850AH8420055	Loading Shovel	500 Hours	Daily	LOLER Tested
Case CX210E	DCH210R8NPE8H1301	Excavator	500 Hours	Daily	LOLER Tested
Extec E7	8850	Screener	500 Hours	Daily	
Washbear XL	17500-52101	Wash Plant	500 Hours	Daily	
McCloskey J45	*TBC*	Crusher	500 Hours	Daily	

Appendix 5 **Site Plan and Process Diagram -** To be read in reference with Appendix 2 Description of the Recycling and Crushing Process – Flowchart of the Recycling and Crushing Process



Stockpile Legend			Equipment Legend		
Reference	**Name**	**Location**	**Reference**	**Name**	**Location**
1	17 09 04 – Recycling Plant Input	Waste Processing Building (Internal)	**A**	Recycling Plant	Waste Processing Building
2	<50mm Recovered Aggregate – Secondary Screening	Waste Processing Building (External)	**B**	Extec E7 Screen	Inert Processing Area
3	>50mm Recovered Aggregate – QP Compliant	Waste Processing Building (External)	**C**	Washbear Material Separation Plant	Inert Processing Area
4	<50mm Aggregate Secondary Screening	Inert Processing Area (Extec E7 Screen)	**D**	Crusher Plant	Inert Processing Area
5	<50mm Recovered Aggregate – QP Compliant	Inert Processing Area (Wash-bear)			
6	Crusher Input – Combined QP Compliant Materials	Inert Processing Area (Crusher Plant)			
7	Crushed aggregate to specified grade (Type 1)	Inert Processing Area (Graded Material Stockpiles)			
8	Crushed aggregate to specified grade (6F5)	Inert Processing Area (Graded Material Stockpiles)			

Appendix 6 Records to be Maintained

All records are held by Remondis Ltd for a period of 3 years, after which they will be destroyed.

List of records to be held by Remondis Ltd

Record	Location
Waste Transfer Notes (WTN)	Remondis Ltd | Birtley Transfer Station | Site Office
Plant and Equipment Plan (PEP)	Remondis Ltd | Birtley Transfer Station | Site Office
Laboratory Test Results (All Products)	Remondis Ltd | Birtley Transfer Station | Site Office
Site Accident Book	Remondis Ltd | Birtley Transfer Station | Site Office
Internal Audit Documents	Remondis Ltd | Birtley Transfer Station | Site Office
Risk Assessments	Remondis Ltd | Birtley Transfer Station | Site Office
Environment Agency Reports	Remondis Ltd | Birtley Transfer Station | Site Office
Daily Aggregate Process Control Document	Remondis Ltd | Birtley Transfer Station | Site Office
Non-Conformance Report Form	Remondis Ltd | Birtley Transfer Station | Site Office

Rejected Loads

Remondis Ltd records every rejected delivery (within reason) on a Non-Conformance Report Form. The procedure for waste rejection and the required documentation is implemented through the site Environmental Management System (EMS), specifically 'BIRTLEY EMS 002 – Waste Acceptance, Quarantine and Rejection Procedures'.

The reason for rejection is discussed with the supplier of the rejected load, together with actions to avoid future rejections. The Non-Conformance Report Form will be annotated with a date to indicate that the reasoning has been discussed with the supplier.

Type, Format, Location and Responsibilities with regard to Records, Information and Documentation

Notwithstanding the below, the Site Operations Manager is ultimately responsible for the accurate recording and presentation of all information and documentation.

Information type	Information Format	Location of Information	Staff Responsible
Feedstock waste category and tipping zone allocation	WTN / Weighbridge Ticket	Electronic / Site Office	Weighbridge Operator
Weight of feedstock waste	WTN / Weighbridge Ticket	Electronic / Site Office	Weighbridge Operator
Any other documentation reporting the identification of the load (if applicable)	Other supporting paperwork (i.e. classification tests)	Electronic / Site Office	Weighbridge Operator Site Management
Records of acceptance or rejection	WTN / Weighbridge Ticket / Non-Conformance Report	Electronic / Site Office	Weighbridge Operator Site Management

Record of Controls

Results of controls will be recorded on the Daily Aggregate Process Control Document (Appendix 7). The Daily Process Control Document will be kept and monitored by the Site Operations Manager in the main office.

Appendix 7 Daily Aggregate Process Control Document

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BIRTLEY QMS 001 D1 - Daily Aggregate Process Control Document

Supervisor Name:_____ Date (Monday): _____

✓ Tick to indicate conformance X Cross to indicate issue or non-conformance

Crusher Plant								
Plant Guards Guards across the plant in place and secure?	Daily Pre-Start	MON	TUE	WED	THU	FRI	SAT	SUN
Emergency Stops Test all e-stops and ensure function.	Daily Pre-Start	MON	TUE	WED	THU	FRI	SAT	SUN
Discharge Belt(s) Check for damage, wear or blockages.	Daily Pre-Start	MON	TUE	WED	THU	FRI	SAT	SUN
Crusher Jaws Condition of jaws, any wear?	Weekly	MON						
Over-belt Magnet Drive belt condition/material between rollers?	Daily Pre-Start	MON	TUE	WED	THU	FRI	SAT	SUN
Greasing Machine Greased?	Daily Pre-Start	MON	TUE	WED	THU	FRI	SAT	SUN
Dust Suppression Dust suppression on / dust levels controlled?	Daily Pre-Start	MON	TUE	WED	THU	FRI	SAT	SUN

Extec E7 Screen								
Plant Guards Guards across the plant in place and secure?	Daily Pre-Start	MON	TUE	WED	THU	FRI	SAT	SUN
Emergency Stops Test all e-stops and ensure function.	Daily Pre-Start	MON	TUE	WED	THU	FRI	SAT	SUN
Discharge Belt(s) Check for damage, wear or blockages.	Daily Pre-Start	MON	TUE	WED	THU	FRI	SAT	SUN
Greasing Machine Greased?	Daily Pre-Start	MON	TUE	WED	THU	FRI	SAT	SUN

Wash bear								
Plant Guards Guards across the plant in place and secure?	Daily Pre-Start	MON	TUE	WED	THU	FRI	SAT	SUN
Emergency Stops Test all e-stops and ensure function.	Daily Pre-Start	MON	TUE	WED	THU	FRI	SAT	SUN
Greasing Machine Greased?	Daily Pre-Start	MON	TUE	WED	THU	FRI	SAT	SUN

Processed Aggregate Stockpiles								
Deterioration Visual inspection for deterioration	Daily Ongoing	MON	TUE	WED	THU	FRI	SAT	SUN
Contamination Visual Inspection for contamination	Daily Ongoing	MON	TUE	WED	THU	FRI	SAT	SUN
Segregation Clear segregation between stockpiles	Daily Ongoing	MON	TUE	WED	THU	FRI	SAT	SUN

Defect Notes (Detail any defects noted and corrective action taken):

Appendix 8 Sampling Process

Remondis Ltd uses a UKAS Accredited 3rd party sampling organisation (currently Ian Farmer Associates Ltd) to ensure that our materials are independently sampled and tested in line with the required standards as outlined in Appendix 9, Finished Products Testing Regime and Limiting Values.

All samples are taken directly from our stockpiles using the below method and in accordance with BS EN 932-1 Tests for general properties of aggregates Part 1. Methods for sampling;

Bulk sampling

Sampling increments of approximately equal size shall be taken from different points at different heights or depths distributed over the complete stockpile.

The location and number of sampling increments shall take into account the way in which the stockpile was built, its shape and the possibility of segregation within the stockpile.

A sampling increment shall be taken using a scoop, a shovel or a grab from the deepest point of each hole.

The minimum mass of the bulk sample shall be generally in accordance with the following equation;

Where:
M= mass of sample in kilograms
D = maximum grain size in millimeters
Pb = is the loose bulk density, in tonnes per cubic metre

For Example;
if D = 100mm
if Pb = 1.6 tonnes per m^3
Then M = 6 x √100 x 1.6
M = 96kg of sample

Reduction of a bulk sample by quartering

The bulk sample will be placed on a working surface and mixed thoroughly by heaping it up to form a cone and turning it over with the shovel to form a new cone. The mixing operation will be repeated three times.

When forming the cones, each shovel full will be deposited onto the peak of the new cone in such a way that the aggregate runs down all sides of the cone and is evenly distributed so that different sizes become well-mixed.

The third cone will then be flattened, by inserting the shovel repeatedly and vertically into the peak of the cone, to form a flat heap which has a uniform thickness and diameter.

The flat heap will then be quartered along two diagonals intersecting at right angles. One pair of opposite quarters will then be discarded and the remainder shovelled into a small stockpile.

The process of mixing and quartering will then be repeated until the required sample size is obtained.

Marking and dispatching of samples

Documentation identifying a date of sample, location of sample and a unique sample reference number will then be signed by the UKAS Accredited Sampling Organisation and handed over to the Site Operations Manager.

The sample is then transported, by the UKAS Accredited Organisation, back to their laboratory where the required tests will be carried out.

Appendix 9 Finished Products Testing Regime and Limiting Values

Testing to meet specification and Remondis Factory Protocol Compliance

Property	Test method	Minimum test frequency
Particle size distribution (grading)	BS EN 933-1	1 per month of production working days
Particle density	BS EN 1097-6	1 per month of production working days
Resistance to fragmentation (LA Method)	BS EN 1097-2	2 per year
Classification of constituents	BS EN 933-1	1 per month of production working days
Water soluble sulfate	BS EN 1744-1	1 per month of production working days
California bearing ratio	BS EN 1377: part 4	1 per month of production working days
Plasticity of fines	BS EN 1377: part 2	1 per week of production working days
Resistance to freezing and thawing	BS EN 1367-2	1 per 2 years
Frost Heave	BS EN 812: part 124	1 per year

Limiting values of specification

Test and Limiting Value / Product	Type 1 unbound subbase to clause 803	Capping, Class 6F5, course grading
Particle Size Distribution (Grading)	SHW Table 8/5	SHW Table 6/5
Particle density	Not Required for specification Remondis Protocol requirement only	Not Required for specification Remonids Protocol requirement only
Resistance to fragmentation (LA Method)	≤ LA 50	≤ LA 50
Classification of Constituents	SHW Table 8/3	SHW Clause 601 and table 6/1
Water Soluble Sulfate	Contract Specific Remondis Protocol requirement	Contract Specific Remondis Protocol requirement
California Bearing Ratio	Contract Specific Remondis Protocol requirement	Contract Specific Remonids Protocol requirement
Plasticity of fines	Plasticity index <6	Not Required for specification Remonids Protocol requirement only
Frost / Thaw Resistance	MS_{35} (≤35)	N/A
Frost Heave	≤15mm Mean Heave	Not Required for specification Remonids Protocol requirement only

Appendix 10 Procedure for Non-Conforming Product

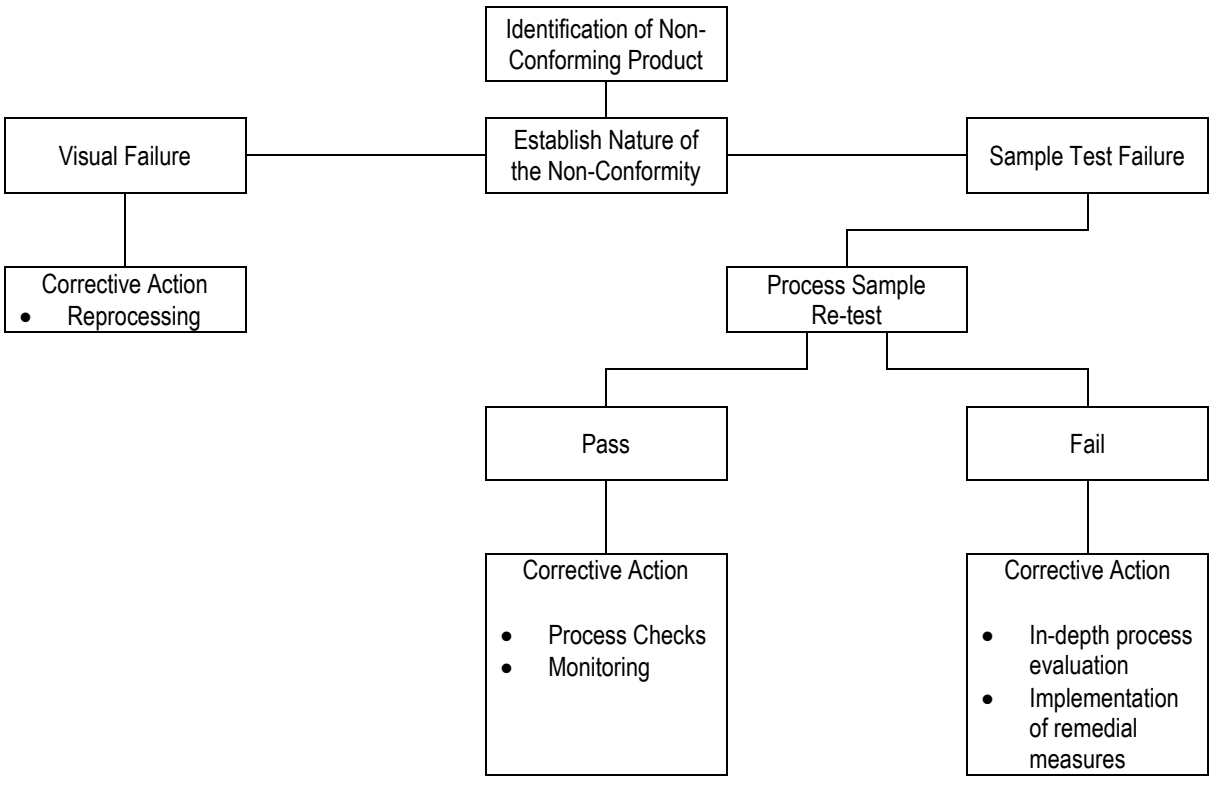
The following procedures shall be implemented following failure of visual assessment or complaint by a customer regarding any of the aggregate produced under this Protocol;

- The Site Operations Manager will complete a non-conforming product form (Appendix 11) and where appropriate, request photographs, make a site visit or arrange for a sample of the material to be returned to the Site for inspection and further testing.
- Corrective action will be taken upon findings of any investigation. Products that have failed visual inspection will be re-processed.

The following procedures shall be implemented following sample test failure notification:

- The Site Operations Manager will complete a non-conforming product form (Appendix 11) and arrange for a sample of material from the production to be returned to the lab for secondary testing.
- Where the results of the re-test test pass the relevant test, it is likely that the original failure will have been down to a sampling anomaly. An evaluation check will be made on the process and further testing closely monitored.
- Where the result of the re-test fail, an in-depth inspection and evaluation of the production process will be made. Where necessary, appropriate remedial measures relating to the production process will be carried out.
- Reasons for failure will be recorded and discussed amongst the Operations Management Team to ensure that there is no repeat of the non-conformance / rejection or general complaint. The corrective action adopted in such instance shall be recorded on the non-conforming product form.

Flowchart for Dealing with Non-Conforming Products



Appendix 11 Non-Conforming Products Form

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BIRTLEY QMS 001 D2 - Aggregate Non-Conforming Product Form

Non-Conformance Type Identified (Circle) : VISUAL FAILURE SAMPLE FAILURE

If Sample Failure include sample reference number:_____

Product Type: Type 1 6F5 **Quantity Involved:**_____

Nature of non-conformance:

_____

_____

_____

_____

_____

_____

Remedial Action(s) Taken:

_____

_____

_____

_____

_____

_____

Person responsible for Investigation:_____

Results of the investigation:

_____

_____

_____

_____

_____

_____

Corrective action taken:

_____

_____

_____

_____

_____

_____

Name:_____ **Date:**_____

Signature:_____ **Time:**_____

Appendix 12 Permits

Notice of variation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Remondis Limited

Westline Transfer Station
Westline Industrial Estate
Birtley
Chester-le-Street
County Durham
DH2 1AU

Variation application number

EPR/EP3495LQ/V006

Permit number

EPR/EP3495LQ