

## Environmental Management System (EMS) for Project Yellow Recycling (PYR) Ltd.

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## 1.0. Introduction

The EMS produced for Project Yellow Recycling Ltd is designed to consolidate all permitted activities allowed under the permit held. This EMS is only applicable for the existing permit (EPR/AB3298HZ) and includes all activities covered within. The following documents were used as to aid the formulation of this management system and the associated documents. The standards outlined within these documents will be adhered to throughout site operations:

How to Comply, SGN5.06, H1 guidance, H4 guidance, the DoWCoP, and the WRAP QP for aggregates.

*The site is situated at:*

**Project Yellow Recycling,  
Ty Newydd Farm,  
Groesfaen,  
Pontyclun,  
CF72 8NE.  
NGR: 306030, 181040**

*The site operator is:*

**Project Yellow Recycling Limited,  
Earthmovers House, Unit 16,  
Llantrisant Business Park,  
Llantrisant,  
Pontyclun,  
CF72 8LF.**

The site was granted full planning permission by way of Lawful development on 30th December 1997 under reference number: 96/2446/09. Other than the shared access (shown on drawing 968-02-C) the site is self-sufficient.

### 1.1. Site TCM

George Harvey is the TCM for the site, certificates are appended to this document.

### 1.2. Site Plans

The extent and layout of the permitted operations are as shown within drawing 968-02-C (2) and 968-04-B (4). If the activities on site vary or alter significantly from those identified within the drawing, a review will be undertaken and an updated site plan will be created.

### 1.3. Restraints

The activities shall not be carried out within:

- a. 500 metres of a European Site or a SSSI;
- b. 50m of any well spring or borehole used for the supply of water for human consumption. This must include private water supplies
- c. 250 metres of the presence of Great Crested Newts, where it is linked to the breeding ponds of the newts by good habitat.
- d. A specified AQMA.

At present, the Operator is not aware of any of the above being located within the stated distances of the site boundary.

Deliveries to and from the site will generally be between 07:00 and 18:00 each weekday and 07:00 and 13:00 on Saturdays.



Mobile floodlights will be used if necessary for operations or if emergency procedures are carried out after official lighting up times

## 2.0. Site Operations

Site operations will be undertaken in line with those requirements highlighted within Table S1.1 of the permit held at site.

For all waste accepted on to the facility full upstream checks are to be carried out before new waste types or suppliers are to be allowed to import waste on to site.

### 2.1. Pre-acceptance procedures

The pre-acceptance procedures adopted at Project Yellow Recycling are in accordance with the Sector Guidance Note 5.06 section 2.1.1. In order to ensure that unsuitable wastes are not accepted onto site, the senior management team will be used to ensure that the materials delivered are suitable to be recovered on site. This will be done by checking that the waste being delivered firstly is coded correctly and secondly whether the EWC code is on the list of permitted wastes at site. The site management will also determine whether the waste is likely to be contaminated due to the site of origin and sample results. This assessment will be visually and olfactory only if the material has had satisfactory soils chemical tests. If it is deemed that the wastes are not suitable to be recovered on site as a result of these procedures; they will not be accepted and will be returned to the waste producer.

A pre-acceptance screening procedure will be used to ensure that the wastes that are being proposed for delivery comply with firstly the requirements of the environmental permit held and secondly, whether the wastes are suitable to be recovered. This process will involve a review of information from the waste producer which may include representative samples of the waste being brought to site before bulk loading inputs.

All waste deposits to be utilised within the above-mentioned treatment process will therefore be pre-booked for acceptance to site.

On arrival all wastes will be visually checked to confirm that they meet the description and EWC assigned by the waste producer. If not, they will not be accepted on to site for any recovery operation and will either be returned to the waste producer or quarantined on site.

Pre-booked deliveries will have to have the following information assigned to them:

- How the waste was derived including any variability within the process.
- The EWC code assigned for the waste.
- Chemical analysis (if required) and composition of the waste.
- Quantity of waste to be delivered.
- Any hazards within the waste.
- How old is the waste material/has it been stored before acceptance;
- Contingency plans for non-conforming waste should the need arise.

It is not anticipated that wastes from companies outside of the local authorities and Tom Prichard Contracting Companies is to be accepted, however, on occasion this may be acceptable if the waste meets the above pre-acceptance criteria. The wastes will still undergo full inspection at the weighbridge and will be directed away from any source segregated materials avoiding cross

contamination. These wastes will then be visually checked by PYR management via on site checks before being incorporated into any further recovery projects.

Testing of feedstock supplies will identify the following:

- Nature of the waste and how it has arisen
- Any variations in the feedstock
- Inhibitory values in the feedstock
- Biodegradability of the feedstock (if high in organic content)

Wastes should not be accepted at the installation without a clear method or defined treatment and disposal/recovery route with a full costing.

## 2.2. Acceptance Procedures

All wastes that are received at Project Yellow Recycling are both visually checked when tipped off and weighed in at the weighbridge.

Duty of care paperwork is checked by the operative in the weighbridge to ensure that the waste is compliant with the EWCs on the permit of the site. It may be the case, as with some local authorities that a season ticket is used for wastes that are repeat loads.

All vehicles that are depositing materials onto site will be directed to the most appropriate waste reception area by the foreman on site. When the load is tipped off, the contents are visually checked for contaminants and to see if the waste matches that described and coded on the accompanying transfer note.

Due to the nature of the waste and how it is collected, there is inevitably going to be a certain amount of contamination in the waste. For example, materials that is excavated from a previously used commercial setting may have pieces of wood/metals within the wastes. In order to remove these contraries a manual picker has been employed on site and the material will be picked here in order to remove all contaminants before being batched for onward processing.

Waste will then be stored on the appropriate surface awaiting the batching and screening/crushing process.

For all loads received, a detailed record is kept that will contain the following information:

- Description of waste
- EWC code
- Date and time of delivery
- Weight of load
- Waste carrier registration number

A monthly and quarterly log is kept (for waste return purposes) of all waste that is accepted at site. This log is checked each month and this ensures that the permitted tonnage will not be breached. If this figure is reached, then waste rejection procedures (detailed below) will be initiated to remain compliant on site.

Batching and tracking of the accepted wastes will also take place upon acceptance to site and as a requirement of both the Small Site Strategy and the QP. The information to be retained and used as part of the batching process will include all information obtained during pre-acceptance, acceptance, storage, treatment and/or removal off-site.

These records will be kept in the site offices in dedicated files so that inspection of loads can be simply carried out.

The tracking system should operate as a waste inventory/stock control system and include as a minimum:

- Date of arrival on-site
- Producer's details
- All previous holders
- Unique reference number
- Pre acceptance and acceptance analysis results if required
- Package type and size
- Intended treatment/disposal route
- Record accurately the nature and quantity of wastes held on site
- Where the waste is physically located in relation to a site plan
- Identification of operation staff who have taken any decisions re; acceptance or rejection of waste streams and decided upon recovery / disposal options

The adoption of such a tracking system will allow for accurate figures with regards current storage and treatment tonnages on site at any one time to be provided.

For any new wastes that are to be accepted onto site, an upstream audit will be carried out throughout the life of the contract, at random intervals. This will ensure that the quality of the wastes remains as consistent as those that were audited in the initial pre-acceptance phase. The risk of accepting these new EWC is not foreseen to increase for site if the correct processes identified within the site-specific risk assessment are maintained.

### 2.3. Waste Rejection Procedures

Waste shall only be accepted at site if it conforms to the list of permitted wastes and if it conforms to the written description of the waste producer.

If, in the unlikely event a waste is accepted onto site that does not comply with the above then the usual site rejection procedures will be enforced:

- The waste will be separated from any other wastes currently on site.
- The driver of the load will be instructed to return the load and will provide detailed reasons as to why the load has not been accepted at site (if not deposited).
- NRW will be informed of the non-compliant load and sent a copy of the on-site log of the activity that will detail the origin and carrier of the load.

## 2.4. Permitted Wastes

Table 1 lists the wastes for Inert non-hazardous and hazardous waste transfer station with treatment.

**Table 1: Permitted LoW and Descriptions.**

01 01 02	Waste from mineral non metalliferous excavation
01 04 08	Waste gravel and crushed rock other than those mentioned in 01 04 07
01 04 09	Waste sand and clays
10 12 08	Waste ceramics, bricks, tiles and construction products (after thermal processing)
10 13 14	Waste concrete and concrete sludge
17 01 01	Concrete
17 01 02	Bricks
17 01 03	Tiles and Ceramics
17 01 07	Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 02 02	Glass
17 03 02	Bituminous mixtures other than those mentioned in 17 03 01
17 05 04	Soil and stones other than those mentioned in 17 05 03
17 05 06	Dredging spoil other than those mentioned in 17 05 03
17 05 08	Track ballast other than those mentioned in 17 05 07
17 09 04	Mixed construction & demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03
19 01 11*	Bottom ash and slag containing hazardous substances
19 01 12	Bottom ash and slag other than those mentioned in 19 01 11
19 12 05	Glass
19 12 09	Minerals (for example soil and stones)
19 12 12	Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11—aggregates only
20 02 02	Soil and stones

## 2.5. Permitted Operations

The operations that are allowed to be undertaken within the permitted area are detailed in the permit as table S1.1; these activities are listed below:

**Table 2: Adapted from table S1.1. of the permit**

Activity reference	Description of activities for waste operations	Limits of Activities
<p>A1 – Inert, non-hazardous and hazardous waste transfer station with treatment</p>	<p><b>R13:</b> Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)</p> <p><b>R5:</b> Recycling/reclamation of other inorganic compounds</p>	<p>Waste coded as 19 01 11* and 19 01 12 must be stored and treated on impermeable surface with sealed drainage to sump.</p> <p>All other waste may be stored and treated on hard standing.</p> <p>Treatment operations shall be limited to manual and/or mechanical:</p> <ul style="list-style-type: none"> <li>• sorting and/or separation</li> <li>• screening</li> <li>• bulking-up for onward transfer</li> <li>• crushing</li> <li>• blending</li> <li>• hydraulic hammering;</li> </ul> <p>Of permitted waste for the purpose of recovery.</p> <p>Treatment of slags and ashes shall be limited to no more than 75 tonnes per day, where carried out for the purpose of recovery or a mix of recovery and disposal.</p> <p>The maximum quantity of hazardous waste that can be stored at the site in total for recovery or disposal, (excluding end of life vehicles and/or waste electrical and electronic equipment stored pending manual dismantling, repair and refurbishment), shall not exceed 50 tonnes at any one time.</p> <p>Waste types as specified in the table above.</p>
	<p>Discharge of integral site drainage (process effluent) from the emission points indicated on the plan referenced below as incorporated into Table S1.2 of the permit.</p>	<p>Drainage consisting solely of:</p> <ul style="list-style-type: none"> <li>• clean, rainfall dependant drainage from areas of the site not used in connection with the storage and/or treatment waste</li> <li>• run-off from the impermeable surface from external areas of the site used to store and/or treat waste</li> </ul> <p>No visible oil, grease or suspended solids shall be present in the discharge</p> <p>Discharge of site drainage shall be controlled through condition 3.1 and the provision of appropriate measures as set out in this EMS.</p>

## 2.6. Wastes Types

See table 1 under section 2.4. of this document for a list of wastes permitted.

Materials will be delivered to the site and stored in unprocessed stockpiles across the site segregated out as far as reasonably practicable, per-job. This is to be done to ensure that each stockpile of unprocessed materials can be tracked back to the source site and so paired with chemical testing of the waste soils. Over the winter period subsoils may be stored in a heap of up to 50,000 tonnes to allow the material to be used in bulk filling contracts during the dryer spring weather. To avoid excessive silt run-off these stored stockpiles will be 'sealed off'; effectively allowing the water to flow over the surface of the material and not to pick up any silt from the stockpile. The soils sub-surface will naturally drain out and so improve the usability of the material.

Mobile crushing and screening machinery will be based on the site to crush and screen wastes to produce a range of graded stone and fill materials suitable for re-sale. All aggregates that undergo this process are done so in line with the requirements of the WRAP QP and are tested routinely to ensure that they comply with the requirements. Suitable soils are tested and treated in accordance with the companies Relevant Soils Product end of waste procedure (see Appendix 2) that is in place at Project Yellow. As both of these processes produce products there will be no need for waste regulatory controls such as duty of care notes, permits or exemptions. The PYR also utilises the CL:aire DoWCoP agreement for large scale remediation projects.

## 2.7. Site Engineering

The site is a former landfill which has been previously used as a waste transfer station with processing under a previous Environment Agency Licence EAWML 30222 dated 20th December 2000.

A compacted surface of crushed stone has been laid on the excavated and filled profiles to provide a suitable hard standing for the proposed operations. This will be maintained as and when required to prevent compaction from impacting upon the site drainage. Certain sections of the yard are wet due to the lack of infiltration properties of the surface, these areas will be uplifted by the placement of suitable aggregates to allow for the surface to be free of pooling rainwater and soft surfaces as far as reasonably possible. The perimeter of the fill areas is surrounded with a bund and planting will be undertaken in order to screen the site from the surrounding countryside and to contain any wastes or suspended solids from entering the adjacent river. Concrete and sealed drainage to be constructed for hazardous waste storage should this be required.

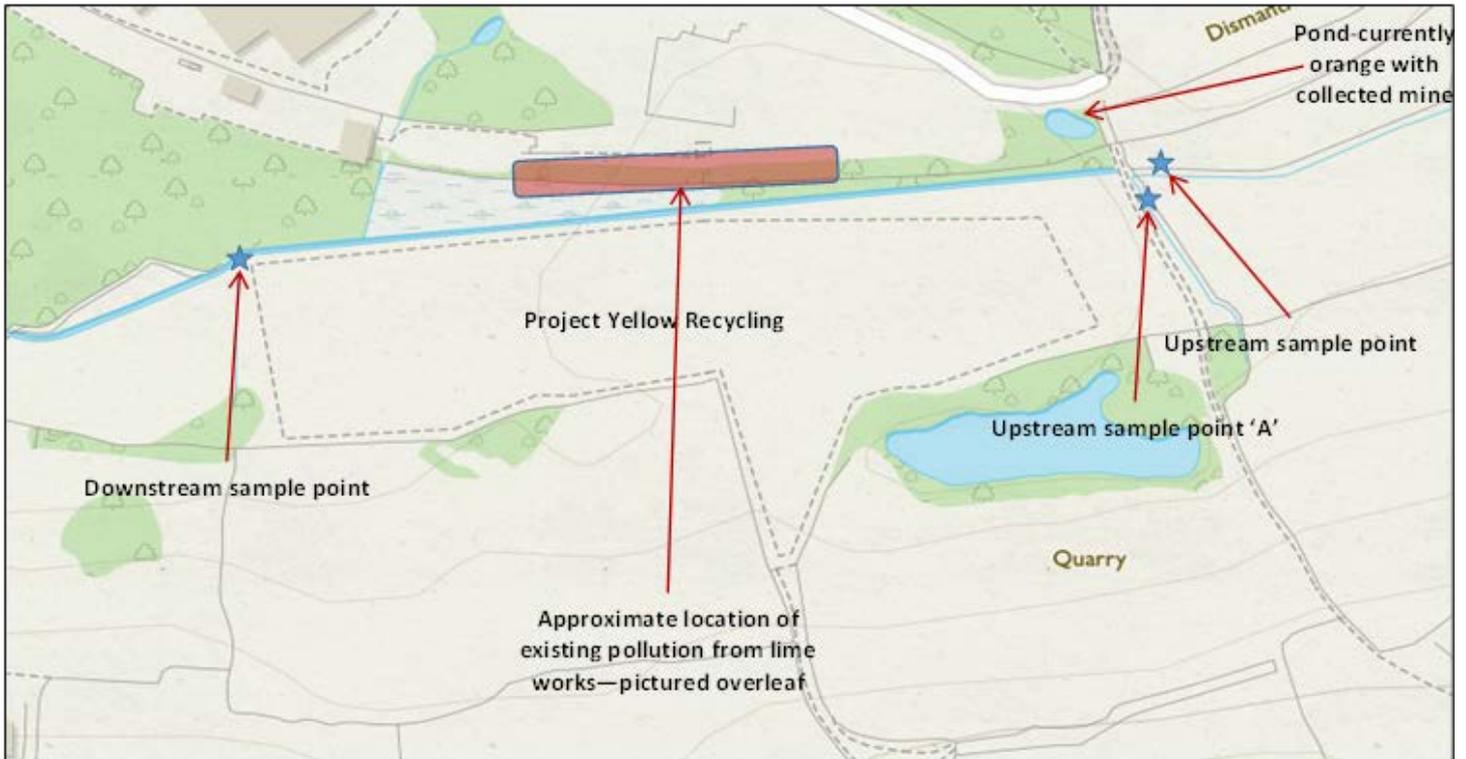
During periods of heavy rain there is a risk that any surcharge will wash through the stored wastes or processed materials and suspended solids will be carried away in the rainwater.

The surface water will be collected as far as reasonably practicable in a central drain near to the front of the site. From here, the water is piped into a series of settlement ponds that have been designed to attenuate the water flows and allow for suspension fallout to occur. The resultant clean water then enters the stream at the permitted discharge point.

A screen will be fitted to the outlet pipe to stop any objects which have floated across the settling pond from discharging to the river if required; this can also be fitted with silt fencing-type material to prevent silt from flowing through freely in periods of heavy rainfall.

## 2.8. Water Monitoring

The surface water is monitored twice per year and at 3 locations. The locations are identified on the sketch of the area below. A control sample was taken at these points before any works were undertaken on the site; however, it is worth noting that several pollution events such as mine-water discharge, lime works run-off and abandoned ELV's were identified and reported to NRW at this time (February 2017), as of yet, all pollutants remain in place and not cleared away. It is thought that these may have an impact on future results as the control samples were taken in a period of dry weather and relatively low flow.





## 2.9. Maintenance

All areas of the site are to be monitored daily for escape of emissions and integrity. Any defects found within the inspection will be reported to the Environmental Manager for the company and a schedule of repair works will be initiated. If a breach of permit conditions has occurred that has resulted in an environmental pollution incident as defined by NRW; NRW will be informed.

Minor defects will aim to be fixed within 5 working days and more major defects will need more substantial planning and resource; therefore, will need a longer timescale for completion.

The drainage system is to be inspected daily to ensure that silt attenuation is effective and not causing a pollution of the local watercourse. The settlement system will be cleared of collected silt once per week in periods of high rainfall and as and when required in periods of low flow to ensure that overtopping does not occur. Any silts collected will be re-deposited on site in an area unlikely to cause further run off.

All mobile plant will be inspected by drivers in accordance with established company procedures. Any repairs will be carried out promptly by the company's maintenance department on site, or if required transported to the company's workshop.

An earth bund has been constructed around much of the site to allow for clear demarcation of the boundary to the site. During busier periods, the bund may be used to store material to gain extra space within the working area of the site. However, this will not occur where the site is in close proximity to the watercourses that surround the site (i.e., within 10m of the watercourse). When possible, the bund will not be used and will act as a boundary marker only.

The bunds will be inspected for waste spill or slip weekly to ensure that the stockpiled wastes have maintained integrity across the site and not crossed the permit boundary. If waste is noted to have migrated outside of the permit boundary, then its removal will be prioritised and the stockpile moved back from the boundary to allow for a buffer zone to be created. The newly created buffer

zone will then be maintained to prevent the migration of waste outside of the permit boundary from occurring once more.

## 2.10. Accident Management Plan

The operator recognises that “accident” for the purposes of this document means an accident, incident or event that may result in pollution.

The site is permitted and licensed to process hazardous, non-hazardous, inert materials only. Therefore, with the correct control measures in place, the risk of contamination is very low across the site.

The following list details those items which require particular attention:

- Breakdown and Spillages
- Drums and other containers
- General accident procedures

### 2.10.1. Breakdowns and Spillages

In the event of breakdown of the loading plant an alternative loading shovel or excavator will be brought on site until it is repaired. If an alternative machine cannot be used, then waste will be stored until the plant is repaired. In the event of a long-term breakdown of the loading plant an alternative machine will be brought on site until the faulty unit is repaired.

Any spillages of fuel will be cleared immediately by depositing materials from a spill kit on the affected area. The material will be placed in a skip/container to be taken to a suitably licensed site for disposal. All spillages of waste and windblown litter will be cleared by the end of the working day in which they occur where practicable.

If there is a risk that dust will be emitted following a malfunction or breakdown the plant will be shut down for repairs.

If there is an unsatisfactory discharge from the settling lagoon the discharge shall be stopped at the outlet pipe until the source of contamination has been removed and the water in the second chamber of the settling pond is running clear.

### 2.10.2. Drums and Other Containers

The acceptance of drummed wastes is not a permitted under the permit held. However, if there is a concealed drum within a load upon receipt; it will be isolated and quarantined as soon as possible. The container will be stored away from all other wastes on site and out of the way from moving plant to avoid any accidental damages etc. The drum will then be removed from site via a licensed contractor and taken to a facility permitted to accept it. If the material is hazardous in nature (identified through labelling etc.), NRW as well as the site from where it originated; will be informed.

If an accidental spillage of the material occurs within the load of soil/aggregate; this material will also be excavated and stored in isolation from the rest of the material on site; to be consigned out as hazardous if required.

## 2.10.3. General Accident Procedures

If an accident or incident causes damage to the environment, or risks doing so, the site manager or a member of staff designated by him must:

- a. Immediately isolate the problem
- b. Report the accident to the Natural Resources Wales local office
- c. Do whatever is necessary to minimise the environmental consequences
- d. Clean up after the incident or spillage
- e. Record the incident or accident, in a report book or folder
- f. Find out why the accident happened
- g. Consider if your response and actions were adequate
- h. Take any actions needed to stop it happening again
- i. Review and amend the accident management plan as soon as possible. Investigate malfunction, breakdown or failure of plant and equipment, techniques and near misses, releases to the environment, or impacts on the local amenity. The site Manager must be able to:
- j. Detect abnormal operation and investigate the causes
- k. Assess the information and decide what to do.
- l. In the short-term, get back to normal operation.
- m. In the long-term take steps to make sure the problem does not happen again.

## 3.0. Monitoring & Emissions

For more detailed procedures please see the Emissions Management Plan (EMP).

### 3.1. Noise and Vibration

Following recent updates to the site infrastructure and working procedures, it is not foreseen that the activities on site will create levels of noise and vibration that would cause a nuisance from outside of the permit boundary. However, the site employs a Noise Management Plan to acknowledge this potential emission and operate in line with its recommendations. If complaints are received then Project Yellow Recycling will implement on site measures, in discussion with NRW to reduce levels noted. The crushing and screening equipment will be maintained and used in accordance with the manufacturer instructions. This will ensure that the plant is working effectively and so reducing the potential for noise and vibration being witnessed.

All drivers have been trained and updated on the company procedures with regards the slamming of tailboards when tipping materials on site. Signs have also been erected at key points on the haul road to remind the drivers to respect the neighbours.

Hybrid plant has been purchased to aid with the reduction of noise by on site excavating equipment. Twice weekly noise monitoring is to be undertaken. This monitoring will be undertaken at random intervals where the site supervisor is unaware of when it is being carried out and from the direction of local receptors. This is to avoid any changes in activity on site to reduce any noise level just for the monitoring period. The aim of the monitoring is to be open, honest and reflective of normal operations. If excessive noise levels are noted (whether from Project Yellow or other companies within the area), the findings will be passed on to NRW.

### 3.2. Control of mud and debris

The surfacing of the site is largely made up of compacted material and hard-core; the trucks that enter and leave the site are to make use of an existing wheel wash facility at the site entrance. A company owned road sweeper is also used several times per week routinely on the haul road and main public highway to reduce any debris/mud from impacting public roads. If a report is called in, the sweeper is actioned immediately to clean the area of concern. The internal haul road has recently been constructed and upgraded to tarmac in an attempt to improve the quality of the local highways and prevent mud and debris escaping the site boundary.

### 3.3. Control and monitoring of dust

All site operations will be carried out to minimise the creation of dust. A water hose will be used to spray the site surface and the inert waste to prevent the formation of excessive dust. During dry conditions or when dealing with dry wastes a water hose or vacuum tanker will be used to spray the site surfaces to prevent the formation of excessive dust - this particularly applies to site roads, storage, loading and unloading areas.

Trees have been planted along the haul road for a longer-term solution. The trees will act as a physical barrier to block the dust from migrating off the roadway when trucks are delivering to and exporting from site.

Site infrastructural improvement schemes have also been made to the haul road to mitigate against the risk of dust from the movement of trucks. The hard standing surface has now been laid to tarmac and is be regularly swept.

During periods of prolonged dry weather, the site supervisor will monitor the levels of dust emissions and respond appropriately.

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## Appendices

## EMS Appendix 1

Factory Production Control System (FPCS) for the production of recycled aggregates at Project Yellow Recycling (PYR) Ltd.

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1.0	23/11/21	Implementation of Factory Production Control System.

## 1.0. Scope

The Factory Production Control (FPC) is defined in the Construction Products Directive as a control system introduced by the manufacturers to; monitor production, ensure that the required product characteristics are achieved and to maintain consistent output.

Every aspect of this control system should be documented in a body of written policies and procedures, and as such is an integral part of this FPC. The FPC for the production of aggregates is specified in each of the BS EN Standards relevant to aggregates (Table 2), these ensure that they conform to the relevant requirements of the technical specifications.

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.

Each BS EN Standard on Aggregates (Table 2) describes the FPC and its minimum requirements in terms of:

- Organization: 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 as outlined within the BS EN Standards;
- Records: what needs to be recorded and kept;
- Control of non-conforming product: actions to be taken 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.

These requirements are recorded in various documents by appropriately trained staff. The documents will be kept within the main office.

## 2.0. Introduction

This Factory Production Control (FPC) has been developed to provide a uniform control process from which the operators at Project Yellow Recycling (PYR) can reasonably state and demonstrate that their recycled aggregate is a product, has been fully recovered, and is no longer a waste. The framework created by this FPC provides a clear audit trail to ensure compliance with Environmental Legislation. Customers ensuring, they comply with their own Duty of Care obligations and environmental goals can use this document in the audit trail. This FPC is based upon the following documents:

- WRAP “Quality Protocol Aggregates from Inert Waste; end of waste criteria for the production of aggregates from inert waste” 2013.
- Factory Production Control Annexes of the European Standards on Aggregates.

The WRAP Quality Protocol aims to establish a defined quality management scheme that controls both the management of environmental risk from waste stockpile (imported waste onto site) and the management of aggregate processing, to established standards to ensure that materials recovered under its performance criteria meet the quality and conformity requirements for European Standards for Aggregates. The WRAP quality protocol comprises of following key areas; Management and staff responsibilities, Resource Management, Product Realisation (Method Statement of Production), Measurement, Analysis, Improvement and the Factory Production Control.

The aggregate produced by PYR will be regarded as having ceased to be waste, and no longer subject to waste management controls, provided that the following controls taken from the Quality Protocol are adhered to:

- The aggregate conforms to the European standard appropriate to the use it is destined for;
- The aggregate is produced under the Factory Production Control Record System
- That within the Factory Production Control the inputs are limited and controlled
- The aggregate requires no further processing, including size reduction, for the use it is destined;
- The aggregate is destined for a use within the designated market sectors;
- The aggregate will become waste again if it is disposed of or stored indefinitely with little prospect of being used.

The Quality Protocol (QP) for the Production of Aggregates from Inert Waste was published in 2004 and revised in 2013. A review is being carried out by the Environment Agency during 2019, and this document will be revised accordingly. The QP considers the production of aggregates from inert construction, demolition and excavation waste. It is based on a pragmatic approach of material selection through to final product checklists.

The schematic diagram used within Quality Control is illustrated within this FPC. This diagram is based upon the following criteria: obtaining source data, acceptance testing, weighing and categorising, stockpiling, reinspecting and processing to produce the final product stockpiles. Throughout the quality control process, unsuitable materials and failures within the process will result in materials being rejected in order to ensure the quality of the final product.



The 2004 European Standards for Aggregates ensures that there is no discrimination between aggregates from natural, recycled and manufactured materials. The requirement of the Factory Production Control is helping producers of recycled and secondary aggregates to demonstrate the quality of their products.

## 3.0. Management Staff and Resources

### 3.1. Management and Staff

The Company have appointed George Harvey (Environmental Manager; PYR TCM) as responsible for the implementation, maintenance and performance of the FPC. George Harvey will authorise an Approved Deputy to ensure that these duties are undertaken when he is not available. The Approved Deputies are Howard Oakes and Callum Mitchell. The Organisational chart is available in Appendix 1.

Callum Mitchell will be responsible for conducting annual reviews of the whole system to ensure its continuing suitability and effectiveness. The management will ensure that the responsibilities and authorises are defined and clearly communicated within the organisation; and that measurable quality objectives and product requirements are established at relevant levels and functions within the organisation.

Most members of staff are likely to follow procedures that are part of the FPC and therefore will be responsible for the day-by-day implementation of the FPC. As a consequence, procedures that are set in the FPC should clearly identify responsibilities and tasks for each relevant stage of the production process.

Staff performing work that affects product quality shall be adequately informed and trained with regards to the relevance and importance of their activities and how they contribute to the achievement of the quality objectives.

Definition of roles within the organisation and/or site and reporting structure are as follows:

George Harvey will have overall responsibility for the implementation and performance of the FPC. George Harvey holds a full WAMITAB certification and maintains significant experience within the industry.

Howard Oakes as the Recycling Manager will act as Approved Deputy and will assume responsibility if George Harvey is not available. Howard Oakes currently holds a WAMITAB Level 4 Diploma in Systems and Operations Management.

Simon Simpson is the site supervisor and shall provide support to Howard Oakes by means of day to day running of operations at PYR.

Callum Mitchell (Environmental Assistant) is responsible for ensuring that the testing of quality product is undertaken in line with the frequencies and requirements of the PYRFPCRS and the relevant BS EN standards for the production of recycled aggregate for the respective end uses. Callum Mitchell also has the responsibility to undertake the annual review of the whole system.

George Harvey shall be informed immediately if any environmental issues arise.

Jason Cornock shall be informed immediately if any health and safety issues arise.

Operating staff will be informed on the steps involved within the FPC, they will all report to Howard Oakes (Recycling Manager) or his Approved Deputy.

## 3.2. Resources

The majority of waste material processed on site will arise from the construction and demolition industry. Some waste material also arises from household and commercial waste. If applicable, as part of our duty of care we will visit the suppliers' operations (demolition site, quarry, waste production site etc.). We will check that our suppliers either hold an Environmental Permit, the relevant Exemption or are a registered Waste Broker. The carrier of such material must be a registered Waste Carrier. Acceptance or rejection of waste contractors' services will be communicated to them in a timely manner.

PYR operates under an Environmental Permit that permits the company to transfer and treat waste materials for recycling purposes. A copy of this permit is available in Appendix 1 of this FPC.

The activities associated with the aggregate recycling operation shall not extend beyond the permitted site boundary as shown within the Environmental Permit, Appendix 1. The Environmental Permit is inspected by Natural Resources Wales on a regular basis.

PYR processing area consists of the following equipment to allow segregation of the waste; weighbridge/weighbridge office, separate areas for waste segregation by type, 2x360 grab machines, loading shovel, 2 x Crushers, 2 x Screens and picking area. Each load after being visually checked at the acceptance stage is tipped into the appropriate bay. Only suitable material for recycling will be stockpiled and so processed. These are only those materials that are permitted and included within the Quality Protocol (QP) and that comply with the restrictions of the QP. The material is picked manually at this stage allowing for the vast majority of physical contaminants to be removed. A wind shifter can also be used at this stage for the processing of glass waste to ensure that any paper etc is removed from the material before final processing. The tipped waste that is suitable for processing is treated using a 360 excavator that loads clean aggregate into the crusher which in turn feeds a three-way screen producing specific recycled product that is then put into designated stockpiles. A further 360 excavator loads a separate screen that sorts a mixture of stone and soil into its separate fractions. A magnet is used within the screen and crushing machinery to ensure that no metal wastes remain within the materials. The metal wastes are removed from site and taken for onward recovery.

The Factory Production Control requires that Tom Prichard Contracting will provide for the control, calibration and maintenance of inspection, measuring and test equipment. Plant and equipment, including test tools will be serviced regularly and calibrated where applicable. These records will be stored within the site office; the records will be stored for at least two years.

Storage areas for goods such as input materials, equipment and products, will be clearly defined and marked on the site office board for clear identification. This will ensure that such goods are stored to prevent damage and deterioration and can be maintained in accordance with the supplier's recommendations and regulatory requirements.

## 4.0. Waste Acceptance Procedures

All wastes that are received at Project Yellow Recycling are both visually checked when tipped off and weighed in at the weighbridge.

Duty of care paperwork is checked by the operative in the weighbridge to ensure that the waste is compliant with the EWCs on the permit of the site. It may be the case, as with some local authorities that a season ticket is used for wastes that are repeat loads.

All vehicles that are depositing materials onto site will be directed to the most appropriate waste reception area by the foreman on site. When the load is tipped off, the contents are visually checked for contaminants and to see if the waste matches that described and coded on the accompanying transfer note.

Due to the nature of the waste and how it is collected, there is inevitably going to be a certain amount of contamination in the waste. For example, materials that is excavated from a previously used commercial setting may have pieces of wood/metals within the wastes. In order to remove these contraries a manual picker has been employed on site and the material will be picked here in order to remove all contaminants before being batched for onward processing.

Waste will then be stored on the appropriate surface awaiting the batching and screening/crushing process.

For all loads received, a detailed record is kept that will contain the following information:

- Description of waste
- EWC code
- Date and time of delivery
- Weight of load
- Waste carrier registration number

A monthly and quarterly log is kept (for waste return purposes) of all waste that is accepted at site. This log is checked each month and this ensures that the permitted tonnage will not be breached. If this figure is reached, then waste rejection procedures (detailed below) will be initiated to remain compliant on site.

Batching and tracking of the accepted wastes will also take place upon acceptance to site. The information to be retained and used as part of the batching process will include all information obtained during pre-acceptance, acceptance, storage, treatment and/or removal off-site.

These records will be kept in the site offices in dedicated files so that inspection of loads can be simply carried out.

The tracking system should operate as a waste inventory/stock control system and include as a minimum:

- date of arrival on-site
- producer details
- all previous holders

- unique reference numbers
- pre acceptance and acceptance analysis results if required
- package type and size
- intended treatment/disposal route
- record accurately the nature and quantity of wastes held on site
- where the waste is physically located in relation to a site plan
- identification of operator's staff who have taken any decisions re acceptance or rejection of waste streams and decided upon recovery / disposal options

The adoption of such a tracking system will allow for accurate figures with regards current storage and treatment tonnages on site at any one time to be provided.

#### 4.1. Rejection procedures

Waste shall only be accepted at site if it conforms to the list of permitted wastes and if it conforms to the written description of the waste producer.

If, in the unlikely event a waste is accepted onto site that does not comply with the above then the usual site rejection procedures will be enforced:

- The waste will be separated from any other wastes currently on site.
- The driver of the load will be instructed to return the load and provided will detailed reasons as to why the load has not been accepted at site (if not deposited).
- NRW will be informed of the non-compliant load and sent a copy of the on-site log of the activity that will detail the origin and carrier of the load.

## 5.0. Method Statement of Production

The fundamental principle is that the end product must be produced in accordance with the WRAP Quality Protocol to demonstrate the quality of the products. Only inert waste materials will be accepted (Table 1). The following outlines the legal definition of inert waste along with the more practical EWC categories that will be used by site staff during their initial assessment of the waste. The following definition of inert waste was taken from Article 2 (e) of the Landfill Directive:

- It does not undergo any significant physical, chemical or biological transformations
- It does not dissolve, burn or otherwise physically or chemically react, biodegrade or adversely affect other matter with which it comes into contact in a way likely to give rise to environmental pollution, or harm to human health;
- The total leachability and pollutant content and the ecotoxicity of its leachate are insignificant and, in particular, do not endanger the quality of any surface water or groundwater.

PYR will reject immediately any load containing hazardous and deleterious materials, such as: asbestos, chemical waste, mineral oil, tar, other hazardous waste or domestic waste above the respective hazardous levels determined by the WM3. The Regulator will be contacted if required. Provided that there is no suspicion of contamination, the wastes within the following tables are considered to be inert wastes which could be accepted for processing, providing that they satisfy the acceptance criteria.

Table 1: Permitted acceptable inert waste input materials.

Document Template Revision Log		
EWC Code:	Description:	Inclusions/Exclusions:
01 04 08	Waste gravel and crushed rocks	May include excavation from mineral workings.
01 04 09	Waste sand and clays	Waste sand only. Must not include contaminated sand.
17 01 01	Concrete	Must not include slurry
17 01 02	Bricks	
17 01 03	Tiles and Ceramics	
17 01 07	Mixtures of concrete, bricks, tiles and ceramics	
17 02 02	Glass	Must not include fibreglass or glass fibre.
17 03 02	Bituminous Mixtures	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.
17 05 04	Soils and Stones	Must not contain any contaminated soil or stone from contaminated sites.
17 05 06	Dredging Spoil	Allowed only if: Inert aggregate from dredging's. Must not contain contaminated dredging's. Must not contain fines.
17 05 08	Track Ballast	Allowed only if: Does not contain soil and stones from contaminated sites.
17 09 04	Mixed Construction and Demolition Wastes	Allowed only if: The waste is generated from utilities trenching's. 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 appendix if the waste was not mixed.

19 12 05	Glass	Does not include glass from cathode ray tubes.
19 12 09	Minerals, i.e., sand, stones	Must not contain contaminated concrete, bricks, tiles, sand, stone or gypsum from recovered plasterboard.
20 02 02	Soils and Stones	Must not contain contaminated stones from garden and parks waste.

*All method statements will be reviewed regularly, and any amendments will be disseminated to site staff.*

## 5.1. Production Processes

The processing operations that the waste will undergo before being deemed a product by PYR will include all or some of the following operations; initial stockpiling, prior sorting, segregating, crushing, screening and stockpiling of the final recycled products.

The equipment utilised on site at the time of writing includes a picking station, two crushers, and two screeners. This operation is prescribed by Section 3.5 of Schedule 1 to the Pollution and Prevention & Control (England & Wales) Regulations 2000, SI 2000 No 1973 (as amended). Other ancillary machinery includes two loading shovels and a range of various size 360-degree excavators.

## 5.2. Materials Handling and Processing Procedures

Each load after being visually checked at the acceptance stage is tipped into the appropriate bay. Only suitable material for recycling will be stockpiled and so processed. These are only those materials that are permitted and included within the QP and that comply with the restrictions of the QP. The material is picked manually within the picking station at this stage allowing for the vast majority of physical contaminants to be removed. A wind shifter can also be used at this stage for the processing of glass waste to ensure that any paper etc is removed from the material before final processing. The tipped waste that is suitable for processing is treated using a 360 excavator that loads clean aggregate into the crusher which in turn feeds a three-way screen producing specific recycled product that is then put into designated stockpiles. A further 360 excavator loads a separate screen that sorts a mixture of stone and soil into its separate fractions. A magnet is used within the screen and crushing machinery to ensure that no metal wastes remain within the materials. The metal wastes are removed from site and taken for onward recovery.

The aggregates are then stored in designated stockpiles, pending further processing and testing. Further processed via crushing and screening into a variety of grades takes place when the stockpiles are sufficient enough to make large product stockpiles, the grading is dependent upon customer requirements and will vary over time. Typically, at PYR Type 1, 6F5 and Type 3 are to be sold. Processed aggregates are then labelled by stockpile, name and description. Before being offered to the market, the products will be tested to meet the requirements (see below) of the WRAP QP. The non-hazardous IBA may be added into the aggregate recycling process if the relevant SHW parameters are complied with through the relevant testing.

Any materials that fail to meet the testing criteria will be re-processed following this management process once more. If repeat failing of the criteria is witnessed, the entire process will be reviewed on site by the recycling manager.

## 5.3. Manufactured Products

All product designations will be derived from the relevant European Standard for Aggregates and industry specifications. The aggregate types, BS EN Standards, product classifications and specifications can be found within Table B1 of WRAP's Quality Protocol. A section of Table B1 that is specific to unbound aggregates is presented below in Table 2.

It is the intention of PYR to produce unbound aggregates for drainage, fill material and sub-base. If the end uses changes and an aggregate is produced for recycled aggregate for concrete; recycled aggregate for asphalt; recycled aggregate for hydraulically bound mixtures; or reclaimed asphalt for



use in bituminous mixtures, the specifications outlined within Table B1 of WRAP’s Quality Protocol will be referenced.

Table 2

<b>Product Use and associated standards/specification.</b>			
<b>Product &amp; Use</b>	<b>Standard</b>	<b>Specification</b>	<b>Quality Controls</b>
Unbound recycled aggregate: Pipe bedding Drainage	BS EN 13242: Aggregates for unbound and hydraulically bound materials for use in civil engineering work and road construction	Highways Agency Specification for Highway Works (SHW): Series 500 Highway Authorities and Utilities Committee (HAUC): Specification for the reinstatement of openings in highways (SROH)	BS EN 13242: Level 4 Attestation Evaluation of Conformity to BS EN 16236* SHW: Quality Control procedures in accordance with the Quality Protocol for the production of aggregates from inert waste SROH: Compliance with SHW
Unbound recycled aggregate: Granular fill General fill Capping	BS EN 13242: Aggregates for unbound and hydraulically bound materials for use in civil engineering work and road construction	Highways Agency Specification for Highway Works: Series 600 HAUC: Specification for the reinstatement of openings in highways BS EN 13285: Unbound mixtures: Specifications	BS EN 13242: Level 4 Attestation Evaluation of Conformity to BS EN 16236* SHW: Quality Control procedures in accordance with the Quality Protocol for the production of aggregates from inert waste SROH: Compliance with SHW
Unbound recycled aggregate: sub base	BS EN 13242: Aggregates for unbound and hydraulically bound materials for use in civil engineering work and road construction	Highways Agency Specification for Highway Works: Series 800 HAUC: Specification for the reinstatement of openings in highways BS EN 13285: Unbound mixtures: Specifications	BS EN 13242: Level 4 Attestation Evaluation of Conformity to BS EN 16236* SHW: Quality Control procedures in accordance with the Quality Protocol for the production of aggregates from inert waste SROH: Compliance with SHW
Recycled aggregate for concrete	BS EN 12620: Aggregates for concrete	Highways Agency Specification for Highway Works: Series 1000 BS 8500-2: Concrete	BS EN 12620: Level 4 Attestation Evaluation of Conformity to BS EN 16236* SHW: Quality Control procedures in accordance with the Quality Protocol for the production of aggregates from inert waste
Recycled aggregate for hydraulically bound mixtures	BS EN 13242: Aggregates for unbound and hydraulically bound materials for use in civil engineering work and road construction	Highways Agency Specification for Highway Works: Series 800 HAUC: Specification for the reinstatement of openings in highways BS EN 14227-1 to 5 Hydraulically Bound Mixtures: Specifications	BS EN 13242: Level 4 Attestation Evaluation of Conformity to BS EN 16236* SHW: Quality Control procedures in accordance with the Quality Protocol for the production of aggregates from inert waste SROH: Compliance with SHW

*\*BS EN 16236 Evaluation of conformity of aggregates – Initial Type Testing and Factory Production Control.*

The minimum testing frequency for each parameter to be tested against is detailed in the following table. For all testing that it is required a UKAS accredited laboratory is used. The days of production will be recorded within the site diary and used to log time periods for the production of aggregate.

All testing is conducted by accredited laboratories Geo Site and Testing Laboratory Services (GSTL) Ltd.

Table 3

Product Use and associated standards/specification.							
End Use	Standard & Specification	Test	BS Test Reference	Minimum Test Frequency	Recycled Type 1	Recycled Type 3	Recycled 6F5
All End Uses	BS EN 13242 BS EN 12620	Particle size distribution	EN 933-1	1 Per week of production	✓	✓	✓
		Particle density	EN 1097-6	1 Per month of production	✓	✓	✓
		Resistance to fragmentation (LA)	EN 1097-2	2 Per year	✓	✓	✓
		Classification of constituents	EN 933-11	1 Per month of production	✓	✓	✓
		Water soluble sulfate (BRE SD1 Reduced)	EN 1744-1	1 Per month of production	✓	✓	✓
Unbound: Fills Capping Sub-base	SHW Series 600, & 800 SROH	California Bearing Ratio	1377: part 4	1 Per month of production	✓	✓	✓
		Plasticity of fines	1377: part 2	1 Per week of production	✓	✓	✓
		Frost Heave	812: part 124	1 Per year	✓	✓	✓
Aggregates for concrete	BS EN 12620	Particle density and water absorption	EN 1097-6	1 Per Month of production	✗	✗	✗
		Sulfur containing compounds	EN 1744-1	2 Per year	✗	✗	✗
		Chlorides	EN 1744-5	2 Per year	✗	✗	✗
		Influence on setting time of cement	EN 1744-6	2 Per year	✗	✗	✗
Additional	BS EN 13242 & SHW Series 800	Magnesium Sulphate Soundness	EN 1367-2	1 Per two years	✓	✓	✓

## **5.3.1. Production Day**

A production day is defined as the production of 1000 tonnes of aggregate.

## **5.3.2. Production Week**

A production week is the period it takes to complete five production days. If less than five days of production are undertaken in 3 months, then 3 months is the maximum time allowed before tests as scheduled in table 3 are required.

## **5.3.3. Production Month**

A production month is the period it takes to complete 20 production days. If less than 20 days of production are undertaken in 6 months, then 6 months is the maximum time allowed before tests as scheduled in table 3 are required.

## **5.3.4. Production Year**

The production year is defined as one calendar year.

## 6.0. Representation of FPC Implementation

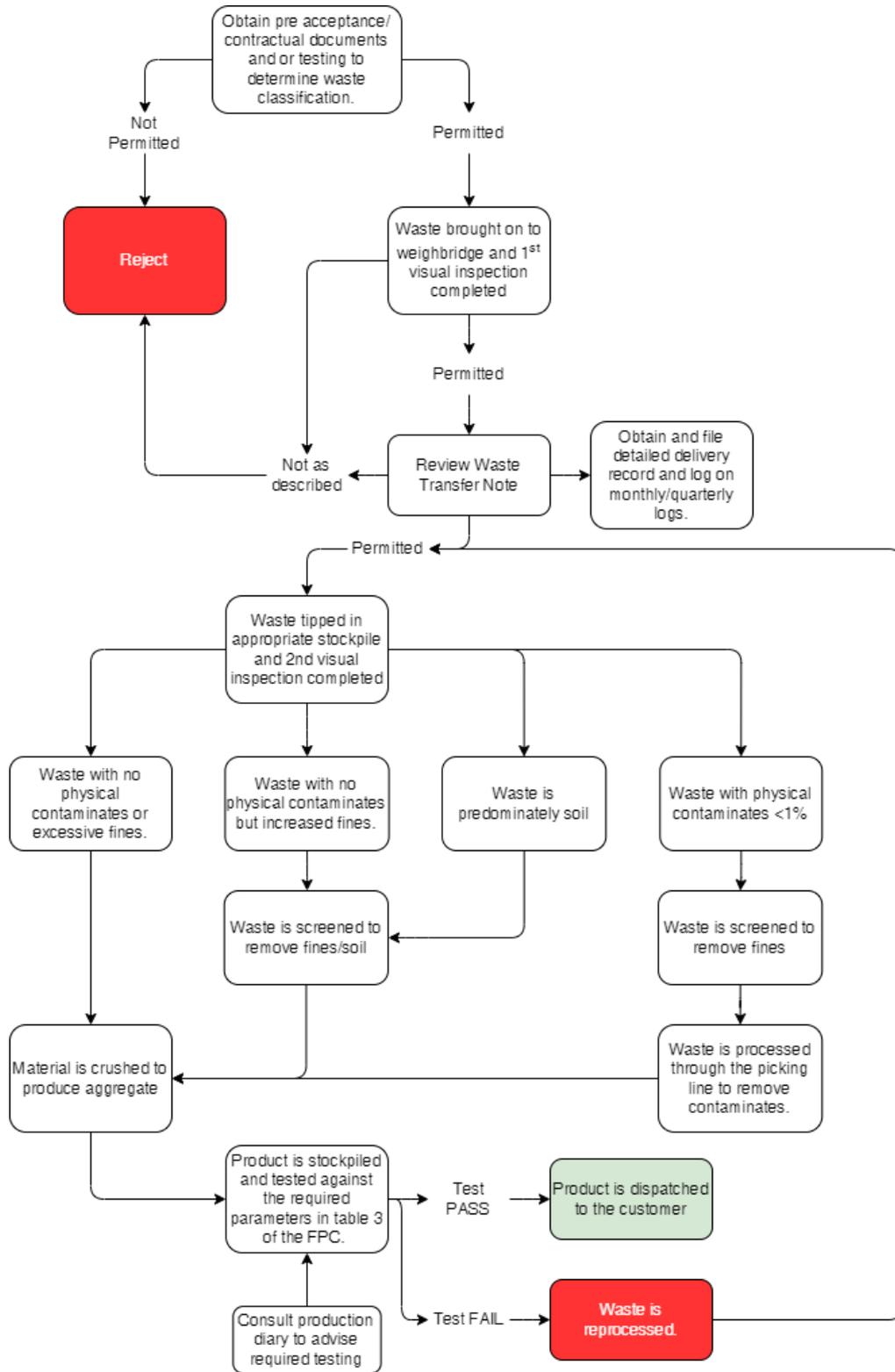


Figure 1: Representation of the implementation of the FPC.

## 7.0. Sub Appendices

### EMS Appendix 1

PYR Environmental permit.



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EMS Appendix 2

Quality Control and Management System

End of Waste for the Production of Relevant Soil Products (RSP)

Document Control	
<b>Document Title:</b>	Quality Control and Management System for the Production of Relevant Soil Products End of Waste Criteria
<b>Document Reference:</b>	QCMS001
<b>Revision Number:</b>	1.0
<b>Date of Revision Enforcement:</b>	13 <sup>th</sup> October 2022
<b>Compiled By:</b>	Callum Mitchell

Revision Log		
Revision Number:	Date:	Description of Changes:
1.0	13/10/2021	Implementation of QCMS001.

## 1.0. Introduction

- 1.1. This document is designed to present the treatment processes that are followed at Project Yellow Recycling (PYR) and Project Red Recycling (PR) hereinafter referred to as 'Site'. The processes covered within this document are the production of Relevant Soil Products (RSP) that are recycled by set on-site processes that enable the use of those soils within the spirit of CL:aire DoW CoP but which meet end of waste criteria.
- 1.2. This document is to be used in conjunction with the in-house End of waste Assessment for the productions of Relevant Soil Product (RSP) attached in Appendix 1.
- 1.3. The processes adopted on site are based procedures identified within the CL:aire DoW CoP.
- 1.4. A quality control system has been adopted on site to ensure consistency across all waste treatment processes.
- 1.5. This document is ever changing dependent upon waste levels and types; however, the fundamental core processes will remain the same.
- 1.6. Quality controls at various stages are required to ensure that the waste hierarchy is being followed and that wastes are fully recovered. These controls will be detailed throughout this document.
- 1.7. This procedure will be reviewed on an annual basis to ensure effectiveness of the system.
- 1.8. Sub-contractors are not anticipated to be used for the production of both WRAP QP and CL:aire soils, however, if the need arises then they will also comply with the requirements of this management system under the supervision of the recycling manager.
- 1.9. It is the responsibility of the recycling manager to ensure that all relevant staff are suitably trained on the procedures surrounding waste acceptance, product sale, rejecting loads, testing and inspection of the systems.
- 1.10. Maintenance of plant will be carried out in-line with the EMS held for the site.

## 2.0. Pre-acceptance Procedures

- 2.1. The pre-acceptance procedures adopted at Project Yellow are in accordance with the Sector Guidance Note 5.06 section 2.1.1. In order to ensure that unsuitable wastes are not accepted onto site.
- 2.2. A pre-acceptance screening procedure will be used to ensure that the wastes that are being proposed for delivery comply with firstly the requirements of the environmental permit held and secondly, whether the wastes are suitable for use in the intended project receiver site. This is an absolute requirement for soils to be used for DoW CoP projects meeting end of waste.
- 2.3. On arrival all wastes will be visually checked to confirm that they meet the description and EWC assigned by the waste producer. If not, they will not be accepted on to site and will be returned to the waste producer.
- 2.4. Pre-booked deliveries will have to have the following information assigned to them:
  - How the waste was derived including any variability within the process.
  - The EWC code assigned for the waste.
  - Chemical analysis (if required) and composition of the waste.
  - Sample locations and depths where appropriate.
  - Quantity of waste to be delivered.
  - Any hazards within the waste.
- 2.5. All wastes delivered are required to have accompanied testing with the exception of the following scenarios:
  - If the wastes already have comprehensive sampling and analysis interpretation, for example, from a ground investigation report carried out by a specialist contractor.
  - If the wastes do not require testing due to the location of excavation, for example from Greenfield sites, residential gardens etc
- 2.6. Small construction, demolition and utilities contractors will not be required to carry out the above testing etc due to the impracticalities of doing so on small quantities of wastes. These will still undergo full inspection at the weighbridge and will be directed away from tested materials avoiding cross contamination. These wastes will then be tested by site via representative sample before being considered for end of waste use and incorporated into any projects.

## 3.0. Materials Acceptance

- 3.1. On arrival, waste will firstly be visually checked before the weighbridge to ensure that the waste is suitable to be accepted. If waste arrives at site and it does not match either the EWC code assigned or the description of the waste is not suitable, the waste will be returned to the producer and not accepted at the facility.
- 3.2. All complaints and reasons for waste rejection will be dealt with head office staff and recorded on a rejected waste spreadsheet in the weighbridge.
- 3.3. If the waste is then correctly reclassified and the EWC is a permitted waste, then the material will be accepted for initial RSP end of waste processing.
- 3.4. Only wastes on the permitted waste table within the permit held will be accepted for processing within the RSP end of waste criteria.
- 3.5. All accepted wastes will be treated and processed to produce a product that is:
  - Distinct and marketable;
  - Will be used in the same way as CL:aire qualifying material; and
  - Will have no worse environmental effects than material that would otherwise be used.
- 3.6. All records of waste acceptance will be maintained on site for inspection by NRW if required.
- 3.7. Soil wastes that are accepted at the site, produced by contractors specified in 2.6 of this, will be stockpiled separately to pre-classified wastes. On completion of the stockpile, representative samples will be taken to ensure that the soils are suitable to be accepted in to the process of RSP end of waste criteria.
- 3.8. If any soils fall outside of the parameters set out in this QCMS, they will not be used for the production of CL:aire CoP compliant soils or end of waste relevant soil product (hazardous cannot be accepted at the facility).
- 3.9. Records of the representative samples of the stockpiles will be maintained in the site office for inspection if required. Soils will be tested for heavy metals, inorganics, PAH's, TPH's and asbestos. A separate 'Classification of Constituents' test will be undertaken to evidence that the waste is free from contamination. Copies of all testing for material used on end of waste relevant soil product will be contained in a project specific file to ensure full traceability.
- 3.10. A detailed record of where all loads accepted have originated from will be kept in the site office and logged to the form QCMS\_Stock. These details must, as a minimum, include;
  - Supplier details
  - Date of waste production
  - Source of waste (location)

- Waste EWC
  - Quantity of the waste
- 3.11. The required information will be recorded as per supplier, per batch, per site and not per load (See section 3.15. for further information).
- 3.12. Any input loads that do not conform to the requirements detailed within the above procedures will be quarantined and rejected.
- 3.13. Once accepted onto site, the loads will be checked once more after tipping. This is to ensure that the load doesn't have any hidden contaminants (deliberately placed at the bottom of the load). If contaminants are found, then the load will be reloaded and returned to the producer of the waste.
- 3.14. Loads with physical contamination may be accepted on to site if it is deemed by the recycling manager that the load can be treated on site to enable the contamination levels be removed from the wastes. Once they have been removed, the wastes can then be stockpiled with the remaining conforming material.
- 3.15. Records of on-site stockpiling, pre-treatment, for used for the production of CL:aire CoP compliant soils or end of waste relevant soil product will be held on the QCMS\_Stock form that details:
- Storage location and stockpile name/number
  - Date when stockpiling began
  - Pre-treatment requirements
  - End of stockpiling date
  - EWC codes for waste inputs
  - Sample data for soils if obtained or required

## 4.0. Materials Processing of RSP Soils

- 4.1. Most soils that are accepted on to site are typically those that have been source segregated at Tom Prichard Contracting Ltd jobs or, where the company have acted as waste carrier for third party customers. These excavations have therefore received prior waste classification and the supervision of staff that will be aware of the relevant procedures after receiving the relevant training from the recycling manager. These materials will be treated separately to RSP soils and utilised under the CL:aire DoW CoP.
- 4.2. As per the acceptance procedures, the soils to be utilised under the RSP end of waste process are to be accepted and stockpiled at site for further processing and shall be chemically analysed after receipt but before acceptance under the RSP process.
- 4.3. The soils will undergo a series of processes that will make them a more viable product for the purchasing company. Customer specifications will be provided to site and the soils will be dispatched where testing evidences compliance with said customer specifications. For example, material marketed as Topsoil will need to conform to BS3882:2015. For RSP material that meets end of waste the testing will be compared to the specific receiving site requirements on the same basis as for those that utilise the CL:aire DoW CoP.
- 4.4. Batches prepared for treatment will be assigned by the recycling manager and RSP's from stockpiles will be blended together (if required) to obtain a product that is suitable for use to meet the customer requirements. Details of quantities treated, blended (if required) and stockpile storage locations will be recorded within the site office on batching paperwork (QCMS\_Bat).
- 4.5. RSP material will be blended so that an appropriate mix of different soils is gained, the material will be screened as part of this process to ensure uniformity throughout and that any remaining physical contaminants are removed.
- 4.6. Depending upon the customer requirements, the soils may be mixed with other soils, sand or PAS100 compost materials (other soil conditioners may be used if required by the customer for soil cultivation).
- 4.7. There are 2 main types of soils that are to be produced on site:
  - i. Top soil for industrial and/or residential uses. The production of this soil will result from a mix of screening and blending of soils to ensure that the end users' specifications are met. These soils will only be used where appropriate testing at the destination site has been provided and risk assessed to ensure that contamination levels remain below the relevant thresholds for the use category when the new soils are added to the location (detailed within the MMP).
  - ii. Compacted fill material. These soils will be provided to ensure that the development is formed on a cohesive and structured base. Client specifications will be used for both the material type and chemical analysis,



only inert qualifying materials will be sent. Testing will be carried out on the material at site before dispatch.

4.8. After on-site processing has taken place, the soils will be stored in designated stockpiles and labelled accordingly. Details of the stockpiled batch will be maintained on the batching sheet (QCMS\_Bat) as:

- Date waste started to be stockpiled (taken from QCMS\_Stock)
- Date stockpiling was completed (taken from QCMS\_Stock)
- EWC codes used in stockpiling (inc. sample data if obtained)
- Processing start date
- Type of processing (inc. blending details if appropriate e.g., quantity from each stockpile)
- Processing end date
- Sample data for post treatment
- Export locations
- Export tonnages per job
- Customer details

4.9. Once stockpiled representative samples will be taken of the soils to ensure that they are suitable for use and categorised correctly for the customer.

4.10. The soils are to be tested for a standard suit of contaminants including, but not limited to; heavy metals, PCBs, PAH, TPH, and pH.

4.11. For each stockpile, external contractors who use UKAS accredited laboratories will be used for the and testing of soils. The process followed to gain the sample is undertaken in accordance with BS 1377, and will be comprised of the following:

<b>Testing</b>			
<b>Envisaged Testing</b>	<b>Fine grained soils* (2mm sieve)</b>	<b>Medium grained soils* (20mm sieve)</b>	<b>Coarse grained soils* (37mm sieve)</b>
Moisture Content	50g	350g	4kg
Chemical Testing	150g	600g	3.5kg
Compaction analysis	80kg	80kg	80kg

\*Representative samples will be taken of the above weights; these will be made up of 26 samples for 100g each. The sample shall be mixed thoroughly to produce a single reduced sample representative of the total stockpiles.

In current UK practice, two sizes of disturbed samples are usually specified:

- 1.0. Small disturbed samples ('jars') 0.5—1.0kg;
- 2.0. Large disturbed samples ('bulk bags') 25—50 kg.



Both types of samples may be placed either in plastic bags, or rigid containers (such as glass jars or boxes). The soil should be packed in such a way that as little air is included as possible; the individual packages should be sealed to be air tight.

## 5.0. Manufactured Products

- 5.1. All products that are manufactured will firstly be subject to a visual inspection to ensure that all physical contaminants have been removed prior to testing in line with the receiving sites specification.
- 5.2. Once the appropriate materials have been sampled and tested to gain compliance with the relevant standard (including the in-house end of waste standard for relevant soil product), the product material can then be sold without the Regulatory parameters for wastes.
- 5.3. All testing results will be maintained and kept within the site offices for inspection by the customer and regulator if required.
- 5.4. All stockpiles of material will be labelled ready for export.

## 6.0. Transport & Delivery

- 6.1. All products that are to be transported and delivered to customers will be carried out by either Tom Prichard Contracting haulage trucks or, on smaller scale projects, via collection by the customer themselves.
- 6.2. Records will be kept for a minimum of 2 years.
- 6.3. For soils that have been supplied to customers under the DoW CoP or end of waste position, records will be provided to the customer:
  - i. The date of supply to the customer
  - ii. Customer's name and contact details
  - iii. Name, address and contact details of the producer of the soils
  - iv. Quantity supplied
- 6.4. The supplier will also maintain records of testing, outline details of the MMP in which the product was created and information on good practice for storage, transportation and handling of the soil in case it is requested by the customer.
- 6.5. Upon completion of the project under the DoWCoP a Verification Report must be completed and retained for a minimum of 2 years.
- 6.6. The sale and delivery of the product materials either under the WRAP QP for aggregates, the CL:aire DoW CoP or the end of waste position for relevant soil products negates the need for the use of waste transfer notes. Instead, the company will provide sale of goods receipts with the documented criteria listed above on them.



## 7.0. Quality Control Documents

Please see below the control documents for the production and deployment of Relevant Product Soils (RSP) that meet end of waste as per the above quality management system.

Document Control	
Document Title:	QCMS Stock Form
Document Reference:	QCMSSF001
Revision Number:	1.0
Date of Revision Enforcement:	13 <sup>th</sup> October 2022
Compiled By:	Callum Mitchell

QCMS Stock Form	
Stockpile start date	
Stockpile end date	
Stockpile reference number	
Storage location	
Processing start date	
EWC codes for input wastes	
Sample data obtained for input	
Supplier details	
Input material origins	
Pre-treatment requirements	
Export for treatment tonnage	
Exported without treatment tonnage	



Document Control	
Document Title:	QCMS Bat Form
Document Reference:	QCMSBF001
Revision Number:	1.0
Date of Revision Enforcement:	13 <sup>th</sup> October 2022
Compiled By:	Callum Mitchell

QCMS Bat Form	
Stockpile start date	
Stockpile end date	
Batch Number	
Stockpile reference number	
EWC codes used for stockpile	
Processing start date	
Type of processing of waste	
Processing end date	
Sample data post treatment	
Export locations	
Exported tonnages	
Customer details	

## 8.0. Sub Appendix 1

### End of Waste Assessment

#### In-House Quality Protocol for Relevant Soils Product

Following recent enquiries and demands from companies seeking suitable material for use in projects requiring recycled soils, the demand has placed pressure on the supply process. As such, an approach was made to NRW regarding the use of soils from sources that were not able to be tested prior to arriving at site, a non-exhaustive list includes homeowners, grab companies, builders and some utilities works. The material produced from the recovery / recycling of these materials are referred to as 'relevant soils product' (RSP).

According to the strict guidelines as laid down by CL:aire, as it is not possible to trace the origin of every source site due to the number and size of the inputs, these materials would not be able to be used under the CL:aire regime.

In light of the above, we approached NRW for agreement to use RSP as the material is able to conform with all other aspects of CL:aire i.e. suitable for use (both chemically and geotechnically) and providing no risk to the environment and human health at the receiving site. The quantity and certainty of use would be determined before any material leaves site and recorded via detailed material tracking procedures. All soil will be rigorously tested prior to leaving and arriving on site to ensure they meet the specified receiving site requirements. All details would be included in a Material Management Plan, identical to that used for a CL:aire declaration, produced in line with a Quality Control Process and verified by an independent QP.

NRW advised that they do not run an end of waste panel and do not review submissions from operators, this is not therefore an agreement which can be made with NRW and it is the operator's responsibility to ensure that they have carried out the appropriate work and maintain evidence to document an End of Waste (EoW) decision. This process would be subject to audits by NRW to assess compliance.

The below outlines the proposed framework for ensuring that the evidence for the EoW decision is robust and in line with the requirements laid down by NRW and prescribed by the Waste Framework Directive and other relevant legislation. As mentioned above, the production process is essentially a mirror of the CL:Aire process to ensure a sufficient degree of integrity and transparency in the decision making process.

#### Waste law principles

The various waste management options can be placed in an order known as the Waste Management Hierarchy which reflects the relative sustainability of each. One of the key principles underlying waste management policy in the UK is to ensure that waste is dealt with as high up the Waste Management Hierarchy as possible. Since all waste disposal options have some impact on the environment, the only way to avoid impact is not to produce waste in the first place, and waste reduction is therefore at the top of the hierarchy. Re-use, followed by recovery techniques (recycling, composting and generating energy from waste) follow, while disposal to landfill or by incineration, the worst options, are at the bottom of the hierarchy.

The RSP will have been through a treatment process and as such would be referred to as recovered / recycled material. This is consistent and embodies the principals outlined in the revised Waste Framework Directive and supports to goal of achieving high quality recycling.

The RSP will also satisfy the requirement of relevant case law laid down in England and Wales and in particular the OSS test in that:

- a. The RSP is distinct and marketable. It is essentially exactly the same as material that is deployed through the CL:aire system. All soil will have been through a designated and specific recycling treatment process and be rigorously tested prior to leaving and arriving on site to ensure the product meets the specified receiving site requirements.
- b. The RSP will be used in exactly the same way as CL:aire qualifying material
- c. The RSP will have no worse environmental effects than material that would otherwise be used.

In addition to the above, wherever possible the Proximity Principle will be applied. This recognises that transporting waste has environmental, social and economic costs so as a general rule, relevant material will be used as near to the place of production as possible. This has the added benefit of raising awareness about waste and encouraging ownership of the problem at the local level.

### **Is the material a waste?**

As the material has been discarded by the original holder and delivered to site for recycling under the controls of the waste duty of care rules. It is also not listed as a material that is excluded from waste rules under Article 2 of the Waste Framework Directive.

### **Is it an activity where waste rules apply?**

The treatment process to make the soil product is consistent with a recovery and / or recycling operation. In reference to Annex II (Recovery Operations) of the Waste Framework Directive, the product would be produced from:

R5 – Recycling / reclamation of other inorganic materials, which includes preparing for re-use, recycling of inorganic construction materials, recovery of inorganic materials in the form of backfilling, and soil cleaning resulting in recovery of the soil.

If it is not classed as a recovery process it would be recycling as an operation by which waste is reprocessed into a product, material or substance, for either its original or other purpose.

As such, waste rules will apply and it must be determined if the material meets the end of waste tests.

### **End of Waste test**

Once a substance or object has been discarded and is waste, something usually needs to be done to it for it to cease to be waste. This can range from something relatively minor to quite extensive processing, comprising one or more recovery operations.

The following criteria will help decide whether a waste has ceased to be waste:

1. Has the waste only been pre-treated, rather than being fully recovered? **No**
2. Does the material meet end of waste criteria? **Yes**
3. Have all unwanted substances (i.e., contamination) been removed from the waste? **Yes**
4. If the waste has been fully recovered / recycled, is it fully suitable for a replacement for a non-waste material? **Yes** - *the material that results from the recovery or recycling of waste is fully suitable as a replacement for the non-waste material for which it is substituting*
5. If the waste has been fully recovered / recycled, is it certain to be used? **Yes** - *there is a genuine market for the recovered or recycled material and its future use is certain*
6. Can the recovered / recycled waste be used without undermining the aims of the WFD? **Yes** – *it does not pose any greater risk to the environment or human health than the non-waste material it replaces.*
7. Has the waste been converted or transformed into a distinct marketable product? *The new product needs to have undergone minor changes to its composition and as such we would refer back to case law and the OSS test referred to above in accordance with Article 6(4) of the WFD. This is satisfied.*



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## EMS Appendix 3

### Materials Management Plan for the Use of Relevant Soil Products (RSP)

Document Control	
Document Title:	Materials Management System for the Use of Relevant Soils Product (RSP).
Document Reference:	MMP-001
Form ID:	MMP001
Revision Number:	1.0
Date of Revision Enforcement:	13 <sup>th</sup> October 2022
Compiled By:	Callum Mitchell

All issues of MMP-001 must be logged on document MMPL-001

Document Template Revision Log		
Revision Number:	Date:	Description of Changes:
1.0	13/10/2021	Implementation document MMP001



## 1.0. Project Scope and Contact Details

This form should be completed once the lines of evidence have been marshalled in relation to end of waste, including suitability for use, certainty of use and quantity required. The answers to the questions posed within this form, together with supporting information will constitute the MMP.

Each question needs to be answered, if a particular question is not relevant then reasons must be stated why this is the case.

1. Specify the scenario to which this MMP applies, as outlined within the CoP;		
ID	Scenario	Use (✓)
1	Reuse on the site of origin	
2	Direct Transfer	
3	Cluster Project	[✓]
4	Combination of the Above	

Cluster project - site cluster project re-occurring as in a fixed soil treatment facility identified within the DoW CoP but used to produce RSP meeting end of waste.

This project will not use the direct transfer of soils as all waste soils will be brought back to the treatment site for treatment and testing before any dispatch takes place.

2. Organisation and name of person completing this MMP;		
Name	Company	Contact Number
[ENTER NAME]	[ENTER COMPANY]	[ENTER CONTACT NUMBER]

3. Form Control		
Date Issued:	Revision Date:	Summary of Revision:



#### 4. Receiver Site Details

Land Owner Details;	
Site/Project Name:	[ENTER DETAILS]
Name of landowner(s) (full addresses and contact details) for where the material is to be reused:	[ENTER DETAILS]
Name of landowner(s) (full addresses and contact details) for where the materials are to arise:	[ENTER DETAILS]

#### 5. Summary and Objectives;

Provide a brief description of the planned project and how excavated materials are to be reused within it:

The soils that are processed within this MMP are to be reused in line with the end of waste criteria and quality management systems advised to NRW. RSP will always be tested prior to export from the treatment site to ensure that they are non-contaminating (based on chemical analysis). The quality control documents operated to onsite will ensure that the treatment process remains consistent across all soil processes.

#### 6. General Plans and Schematics

Attach a schematic of proposed materials movement from the treatment facility for use at the receiver site and reference below. Where there is only one source area and one placement area briefly describe it below:

[ATTACH DOCUMENTS, STATE REFERENCE]

*Parties involved and consultation—if more than one party please provide additional details for them and identify the location that they will be working e.g., where a site is zoned.*

## 7. Supplier and Contractor Details

Main earthworks contractor(s) (full addresses and contact details) where RSP's are to be reused:	[SITE NAME]
Main earthworks contractor(s) (full addresses and contact details) where RSP's are arising from:	[SITE NAME]
Treatment contractor(s) (full addresses and contact details)-for treatment of RSP at Hub site:	[SITE NAME]
Where wastes and materials are to be transported between sites provide details of the transport contractor(s) (full addresses and contact details as well as waste carriers registration details (if applicable)):	[SITE NAME]

## 8. Local Authority Details

For each site where materials are excavated and where materials are to be reused, provide Local Authority contact details (full address and named contact details):	
Hub site LA contact:	[LA CONTACT NAME & OFFICE ADDRESS]
Receiving site LA contact:	[LA CONTACT NAME & OFFICE ADDRESS]

## 9. Regulatory Body Details

For each site where materials are to be reused and for Hub site locations, provide NRW contact details:

Name: [NRW CONTACT NAME]

Contact details and office address: [NRW CONTACT OFFICE ADDRESS]

(For cluster projects)  
Attach any relevant documentation from the regulator relating to the treatment and reuse of the RSP's to demonstrate no objection to the proposals (see 3.37 of CoP):

NRW have been provided with the documents relating to the use of RSP and the determination process for meeting end of waste. Records will be kept in line with the quality management system for NRW to audit and inspect as required.

## 2.0. Lines of evidence

There is no single factor that can be used to decide that a substance or object is waste, or when it is, at what point it ceases to be waste; as complete a picture as possible has to be created. The following sections require completion to ensure the correct decision is made. If a requested item is not relevant it is important to clearly state why this is so (e.g. no planning permission is required because permitted development status exists).

<b>10. Suitable for use criteria</b>	
Please describe or provide copies of the required specification(s) for the material to be reused on each site:	<p>Routine sampling will be undertaken on each batch of soil that is processed at [SITE NAME]. The results of the chemical analysis will be compared to the relevant land use scenarios (if available) and customer specifications. Due to the strict waste acceptance criteria and the permitted waste types allowed at the site, it is not anticipated for any of the results to breach these limits.</p> <p>If the client has specific requirements, these will be tested separately to comply with contractual obligations and will be recorded in the project file.</p> <p>Any additional nutrients added by the customer and any issues associated with this, are therefore outside of the control of [SITE NAME].</p>
Please provide copies or relevant extracts from the risk assessment(s) that has been used to determine the specification for use on the site. <u>This must relate to the place where materials are to be used.</u> This must be in terms of (i) human health (ii) controlled waters and (iii) any other relevant receptors. If a risk assessment is not relevant for a particular receptor given the site setting, please explain why below:	<p>All soils that are processed at [SITE NAME] will meet end of waste. Each batch of RSP materials is representatively sampled for laboratory analysis to determine composition of the product and ensure compliance with end user specification.</p>
Please attach any relevant documentation from the LA relating to the treatment and reuse of the RSP materials to demonstrate no objection (see 3.37 of the CoP):	<p>[ATTACH DOCUMENTS, STATE REFERENCE] – IF NOT CONSULTED STATE WHY.</p>
If the LA has not been consulted, please explain why (3.39 of the CoP):	<p>It is not intended to approach the LA for permissions due to the low risk and end of waste status for the material involved.</p> <p>New / existing residential developments, it is assumed that planning permissions are already obtained by the developer and so further requirements for the use of the material in this strategy would not be</p>

	<p>required. It is important to note however that the materials supplied would be required to meet the specifications (if any) within the granted planning permission.</p> <p>New / existing commercial/industrial projects would already have planning controls in place and they are unlikely to specify any controls surrounding the use of soils on the site. If specifications are included, then they will be complied with and evidenced through chemical testing.</p> <p>Permitted development can also be a factor for projects such as emergency repair or reinstatement works. A specification for material will be sought prior to works commencing.</p>
Please attach any relevant documentation from the Environmental Regulator relating to the excavation and reuse of the materials to demonstrate no objection (3.37 and table 2 of the CoP):	NRW have been provided with the documents relating to the use of RSP and the determination process for meeting end of waste. Records will be kept in line with the quality management system for NRW to audit and inspect as required.
If NRW has not been consulted please explain why (3.39 of the CoP):	As above.
Please attach any relevant documentation from any other regulators (if relevant) relating to the excavation and reuse of the materials to demonstrate no objection (3.37 of the CoP):	Not Applicable.

## 11. Where contamination is not suspected

Please attach copies or relevant extracts from the desk top study that demonstrates that there is no suspicion of contamination:	Please refer to the chemical and physical analysis results.
Please attach copies or relevant extracts from the site investigation/testing reports that adequately characterise the clean materials to be used:	Please refer to the chemical and physical analysis results.
Please attach copies of any other relevant information (if available) confirming that land contamination is not an issue 1:	[ATTACH DOCUMENTS, STATE REFERENCE]

<sup>1</sup> Where available, site investigation reports will be indexed in this section.

Various lines of evidence need to be provided to demonstrate that the materials are certain to be used. This includes:

- The production of this MMP
- An appropriate planning permission (or conditions that link with the reuse of the said materials)
- An agreed remediation strategy
- An agreed design statement
- Details of the contractual arrangements

Please identify in the following sections what lines of evidence relate to the site(s) where the materials are to be used.

## 12. Planning Permission(s) relating to the site where materials are to be reused.

Please provide a copy of the relevant planning permission.

Please explain how the reuse of the excavated materials fits within the planning permission(s) for each site.

If planning permission is not required for any one site, please explain why below e.g., permitted development, clean-up of a chemical spill, surrender of an Environmental permit, re-contouring within the existing permission:

As detailed previously, it is not intended to approach the LA for permissions due to the low risk and end of waste status for the material involved.

New / existing residential developments, it is assumed that planning permissions are already obtained by the developer and so further requirements for the use of the material in this strategy would not be required. It is important to note however that the materials supplied would be required to meet the specifications (if any) within the granted planning permission.

New / existing commercial/industrial projects would already have planning controls in place and they are unlikely to specify any controls surrounding the use of soils on the site. If specifications are included, then they will be complied with and evidenced through chemical testing.

Permitted development can also be a factor for projects such as emergency repair or reinstatement works. A specification for material will be sought prior to works commencing.

### 13. Where contamination is suspected or is known to be present:

Please provide a copy of any remediation Strategy(ies) that have been agreed with relevant regulators:

No hazardous material will be moved under this MMP. If the RSP contains more physical natured contamination e.g., plastics, metals, wood etc then this material can be brought back to site where further treatment and testing will be carried out on the material to ensure that it is suitable for reuse.

### 14. Where contamination is not suspected:

Please provide a copy of any design statement(s) that have been agreed (e.g., with the planning authority or in case of permitted developments, the client):

Not applicable.

### 15. Quantity of Use

Please provide a breakdown of the imported RSP materials and how much will be placed at each site or sub area of each site.

Where this is not specific to a single readily identifiable source refer to an annotated plan, schematic or attach a tabulated summary <sup>2</sup>:

The quantity of use is specific to each project. Quantity of use will be recorded via delivery of goods tickets

How has consolidation/compaction been considered in the above mass balance calculations?

Not applicable.

How has loss due to treatment being considered in the above mass balance calculations (if applicable)?

Not applicable.

How has the addition of treatment materials been considered in the above mass balance calculations (if applicable)?

Not applicable.

<sup>2</sup> An exact figure is not required but one that is reasonable in the circumstances and can be justified if challenged.

## 16. Contingency Arrangements.

<p>Explain what is to happen in the following situations and identify the appropriate clauses in the contract(s) (such clauses must be provided to the QP, preferably as a summary document): or</p> <p>What is to happen to, and who is to pay for out of specification materials?</p>	<p>Out of specification material shall be returned to [SITE NAME] and a management review will outline what action is to be taken next.</p>
<p>What is to happen to, and who is to pay for any excess materials?</p>	<p>Any excess RSP sent in error shall be returned to [SITE NAME] and costs shall be borne by the treatment site.</p>
<p>What happens if the project programme slips in relation to the supply of RSP undergoing treatment?</p>	<p>Due to the small quantities involved, it is not anticipated that this will become an issue.</p>
<p>Other identified risk scenarios for the project (relating to excavated materials)?</p>	<p>The respective treatment facility will arrange for all materials that have been incorrectly supplied to be re-excavated and brought back to [SITE NAME]. The receiver site will then be supplied with compliant material and the land remediated.</p>

## 17. Where contamination is suspected or known to be present, state the procedures put in place to:

<p>For all sites, please describe the tracking system to be employed to monitor materials movements:</p>	<p>Please see the appended Quality Control Management System (Document Ref: QCMS001) that details the pre-acceptance and acceptance procedures for the productions of RSP. Included within this QCMS are details on the stockpiling of materials after acceptance and the batching procedures post treatment. These documented procedures ensure that a detailed audit trail can be followed for all wastes that have been accepted, stored, treated and dispatched at the treatment facility.</p>
<p>Prevent contaminants not suitable for the treatment process being accepted:</p>	<p>Please refer to the waste acceptance procedures within the QCMS.</p>
<p>Prevent cross contamination of materials not in need of treatment, wastes awaiting treatment and treated materials:</p>	<p>As separately identified stockpiles will be maintained throughout the treatment of RSP on site, there will be a physical gap between each stockpile so that cross contamination of stockpiles cannot occur.</p>
<p>Demonstrate that materials that do not require treatment and successfully treated materials reach their specific destination:</p>	<p>Clear stockpile separation will occur on site. Sale of goods notes will be kept in the site office.</p>

<p>Ensure that waste for off-site disposal or treatment is properly characterised and goes to the correct facility:</p>	<p>Duty of care and the waste hierarchy will be followed as per the requirements of the environmental permit held on site.</p>
<p>Please attach a copy of the tracking forms/control sheets that are to be used to monitor materials movements. To include transfer of loads on site into stockpiles prior to treatment (if applicable), stockpiled after treatment (if applicable), stockpiled awaiting use (as appropriate) and final placement:</p>	<p>QCMS_Bat and QCMS_Stock are all appended to the QCMS (Document ref: QCMS001). Delivery tickets and on-site management systems are held in the site offices.</p>

## 18. For hub sites within cluster projects & where materials need treatment before reuse:

Please attach a copy of the Environmental Permit covering the treatment process. Or alternatively if the treatment is covered by a Mobile Plant Permit and associated deployment form, attach a copy of the NRW agreement to the deployment form:

As a regulated facility NRW are aware of the permit numbers and authorisations in place at [SITE NAME], [EPR REFERENCE].

## 19. Records

Where, and in what form, are records to be kept <sub>3</sub>?

All records will be kept in the offices at [SITE NAME] in paper and electronic form. These records will be kept for the time periods required within the Environmental Permit held.

These records will include all documents associated with duty of care and also will include contractual agreements for both the stock ordering process and invoicing. Due to commercial confidentiality reasons these will not be disclosed (can be redacted if required) unless requested for a specific and justifiable reason by NRW.

<sub>3</sub> Records e.g., transfer notes, delivery tickets, desk top study, site investigation, risk assessment(s), verification report(s) need to be kept for at least 2 years after the completion of the works and production of the verification report.

## 20. Verification Report

Provide or explain the verification plan which sets out how you will record the placement of materials and prove that excavated materials have been reused in the correct location and in the correct quantities within the development works (3.4 of CoP).

All records will be kept in the offices at [SITE NAME] in paper and electronic form. These records will be kept for the time periods required within the Environmental Permit held.

These records will include all documents associated with duty of care and also will include contractual agreements for both the stock ordering process and invoicing. Due to commercial confidentiality reasons these will not be disclosed (can be redacted if required) unless requested for a specific and justifiable reason by NRW.



## EMS Appendix 4

TCM Certificates



EMS Appendix 5  
Dust Management Plan



EMS Appendix 6  
Noise Management Plan