


Environmental Management Plan (EMS)

E J Lidster Limited

Land at Junction of Pontefract Road and Burton Road, West Green, Barnsley, South Yorkshire, S71 5SN

Prepared By:

Permit Sealquest Limited EPR/BB3702UV/V002

This Quality and Environmental Management Plan has been written to document the company's processes to ensure:

Activities on site are undertaken to achieve:

- Compliance with permit conditions; and
- That activities do not cause pollution of the environment, harm to human health, nor serious detriment to local amenities, and
- That this is achieved through implementation, monitoring and review of specific procedures and practices.

DOCUMENT CONTROL

This is a working document and must be reviewed and updated as required. Amendments associated with each revision/issue will be identified in the document by underlining, and any previous amendments will be adopted within the document.

Issue	Date	Description	Prepared	Checked By:	Reviewed By:
1	23/03/20	First Issue	K Westlake	A. Lidster	
2	06/04/21	Second Issue	K Westlake	A. Lidster	
3	11/07/23	Third Issue	L Perrin	A. Lidster	
4	05/07/24	Updated waste acceptance procedures	L Perrin		
5	14/03/25	Fourth Issue	I Mathew		

Contents

1. Introduction

This document details the requirements for the management of day-to day activities to ensure that relevant regulatory requirements (e.g. relevant permitting and Duty of Care controls) are met while at the same time ensuring protection of the environment, human health and local amenities. The strategy identified within this document has been established to support the objectives identified within the Company Environmental Policy Statement (Appendix I).

The facility will handle inert waste streams produced from a variety of excavation, construction and demolition activities arising from variable sources. Although the permit holder of the site is Sealquest Limited, E J Lidster Limited operates the site and it is intended to accept deliveries of suitable inert waste streams from other authorised waste management contractors. The permit (SR 2008 No. 11) allows for a limit of "Treatment consisting only of manual sorting, separation, screening or crushing of waste into different components for disposal, or recovery". A permit variation application to a bespoke permit has been submitted to include the washing of soils and aggregates as an additional treatment activity.

With this in mind, the process undertaken on site involves the simple screening of inert construction and demolition wastes using physical crushers, screens and an aggregate wash plant to produce a range of products that are sold off site to the construction industry in accordance with relevant standards within Quality Protocol "Aggregates from inert waste" (Appendix 3). In this way, the activity supports the valuable and sustainable use of resources by ensuring that materials are re- used and recycled to the extent possible in accordance with the principles of sustainable development and the circular economy. No residues are produced that require disposal off- site. The materials produced all comply with the Yorkshire Highways and Utilities Committee (YHAUC) framework in which material suppliers now producing recycled materials conforming to the YHAUC framework, can demonstrate quality products by ensuring their material test results and quality plans are published for stakeholder review. Any material accepted on site will have been subject to pre-acceptance checks as part of the contracting process, or will have been produced according to RPS 211 (Environment Agency, 2023) in relation to excavation of utilities trenches, while site procedures require that all materials are checked upon receipt for conformance with materials description and site permit requirements.

As a consequence, the main risk associated with these activities is that associated with dust migrating off site and to this end site procedures include comprehensive dust suppression as detailed within a separate dust management plan.

All waste delivered to the site will be directed to the site weighbridge to enable the recording of incoming weights. The inert excavation, demolition and construction type wastes will then be directed to a reprocessing area to be crushed or screened. The location of the reprocessing area is shown within Figure 1 (Site Plan), below. Suitably generated soils and subsoil's will be passed through a secondary screening to further improve product quality. Other separated and screened product streams and processed hardcore will be stored in this part of the site prior to re-sale and subsequent removal off site by bulk tipper or containers.

The Site's permit boundary is shown within Figure 1, while Figure 2 shows the site's location of activities in relation to the surrounding area.

The site is located on former railway land designated for industrial usage at West Green Way, West Green, Barnsley S71 5SN, with neighbouring land being utilised for similar industrial activity.

The site has a long standing planning permission for the waste transfer activities under planning permission reference B/92/1021/64 granted on 28 Jan 1993.

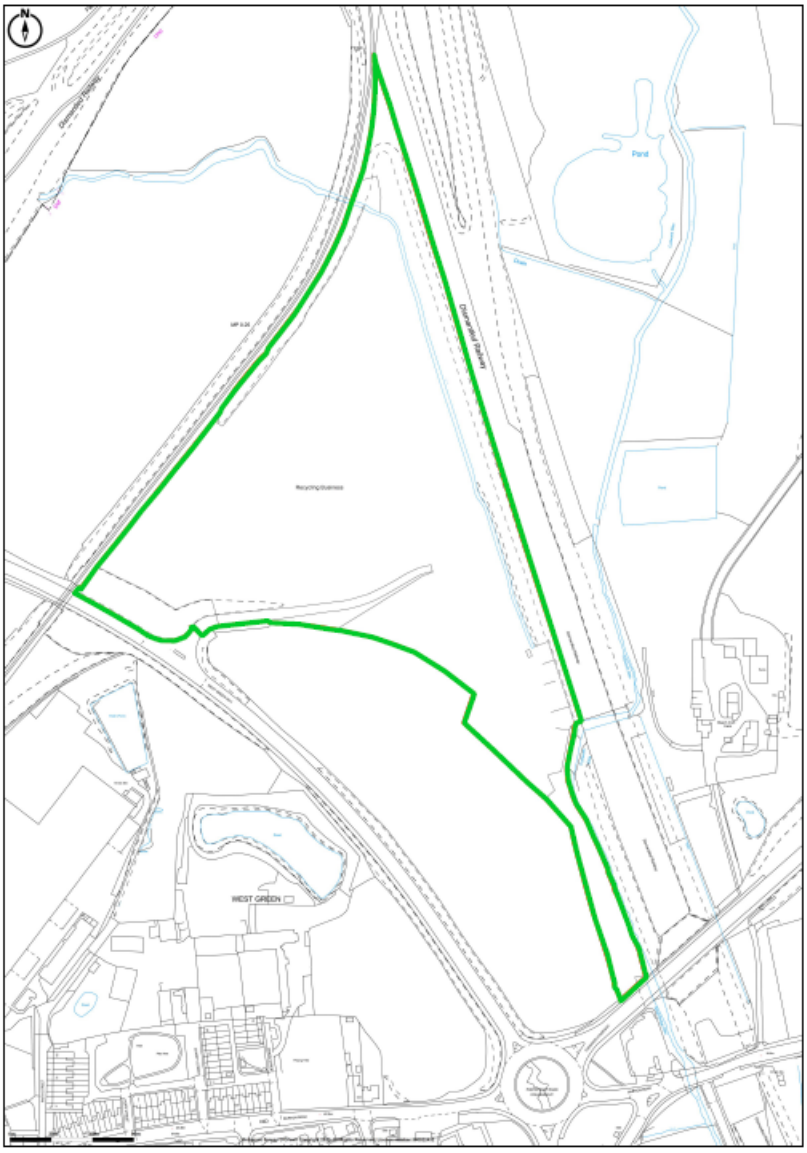


Figure 1: New permit boundary of site identified in green.

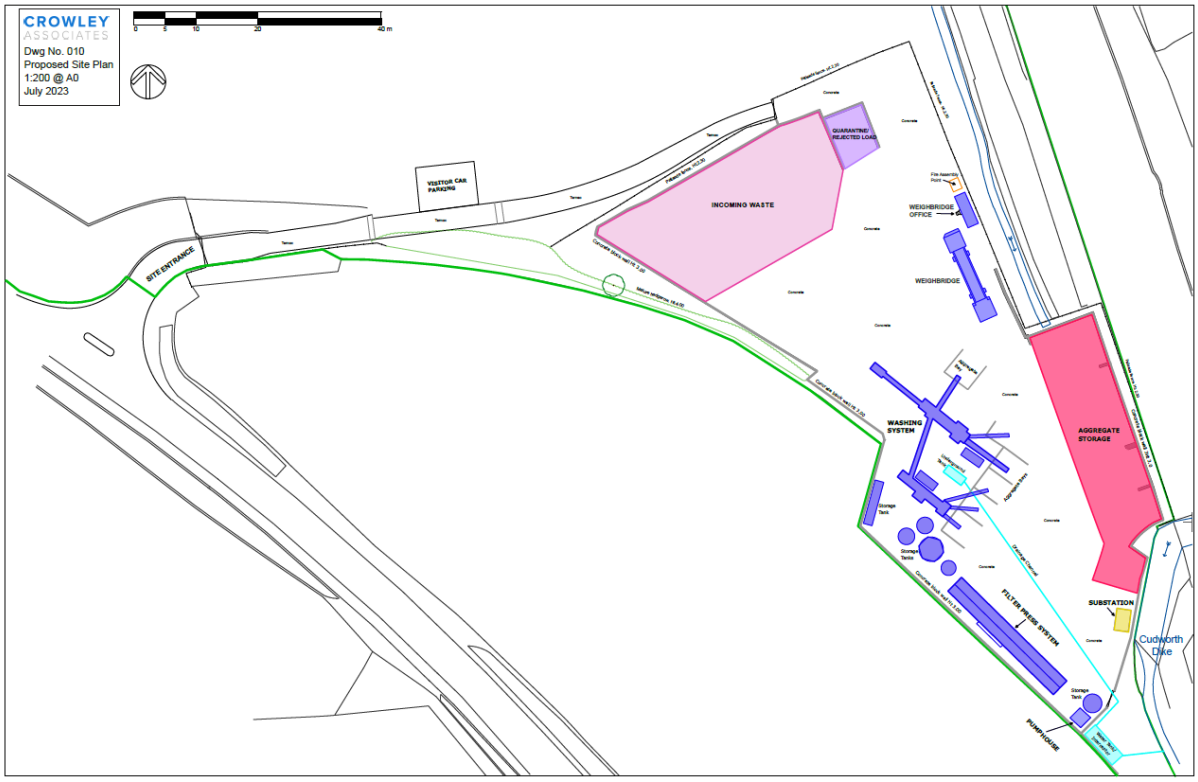
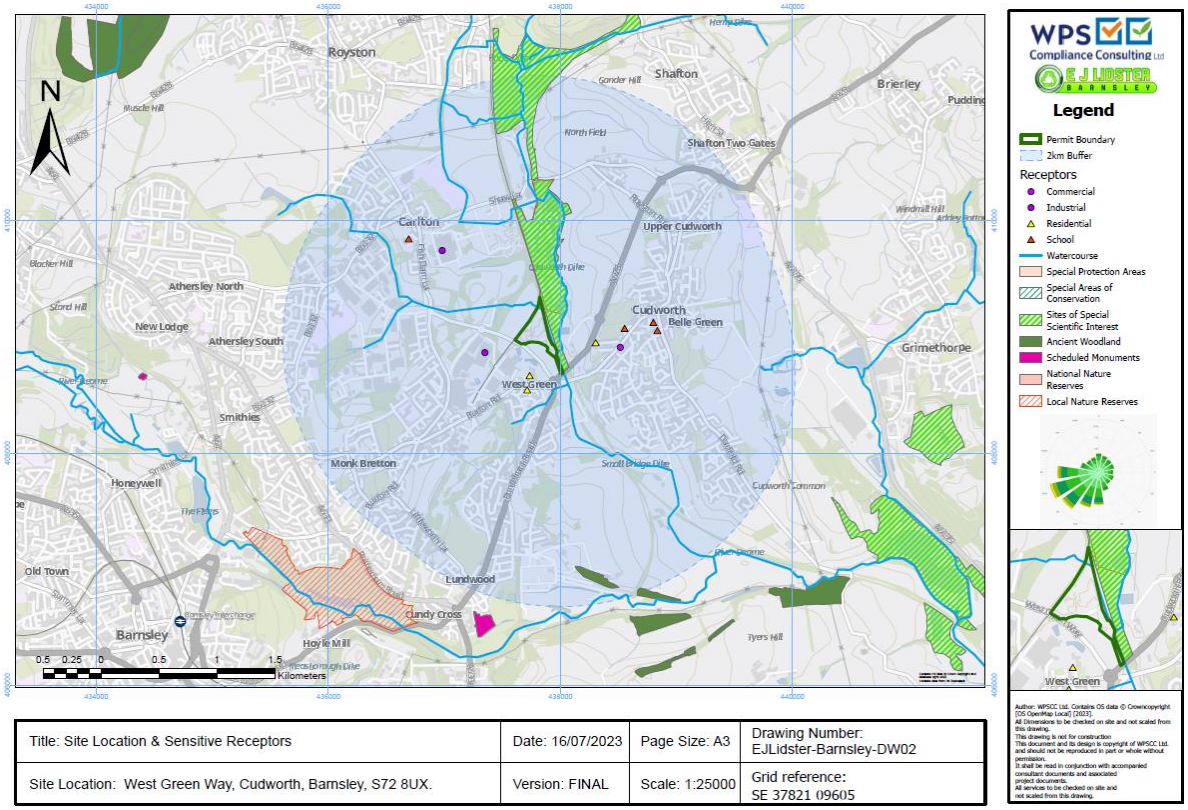


Figure 2: Site Activities Plan



Title: Site Location & Sensitive Receptors	Date: 16/07/2023	Page Size: A3	Drawing Number: EJLidster-Barnsley-DW02
Site Location: West Green Way, Cudworth, Barnsley, S72 8UX.	Version: FINAL	Scale: 1:25000	Grid reference: SE 37821 09605

Figure 3 displays the site and the nearest receptors within 2km of the site.

2. Risk Assessment

As stated in the permit, the following materials are accepted on site as shown in Table 1.
INSERT ONCE PERMIT VARIAITION APPROVED

Table 1: List of permitted materials for processing.

In practice, the materials received on site for processing comprise inert aggregates with the EWC code 17 05 04 and is made up of soil and stones of different sizes. Appendix 3 shows the quality protocol for production of recycled aggregates with waste pre-acceptance and acceptance procedures. It also explains the site operations. Appendix 4 explains the site operating procedures for the aggregate wash plant.

The risk assessment for the permit variation from standard rules to bespoke permit is presented in Table 2 and applies to activities on site.

Data and information				Judgement				Action (by permitting)	
Receptor	Source	Harm	Pathway	Probability of exposure	Consequence	Magnitude of risk	Justification for magnitude	Risk management	Residual risk
What is at risk? What do I wish to protect?	What is the agent or process with potential to cause harm?	What are the harmful consequences if things go wrong?	How might the receptor come into contact with the source?	How likely is this contact?	How severe will the consequences be if this occurs?	What is the overall magnitude of the risk?	On what did I base my judgement?	How can I best manage the risk to reduce the magnitude?	What is the magnitude of the risk after management? (This residual risk will be controlled by Compliance Assessment).
Local human population	Releases of particulate matter (dusts) and micro-organisms (bioaerosols).	Harm to human health - respiratory irritation and illness.	Air transport then inhalation.	High	Medium	High	Permitted waste types are inert and do not include dusts, powders or loose fibres and have a low potential to produce bioaerosols, but the treatment activities will produce particulate matter so a high magnitude risk is estimated. There is potential for exposure if anyone is living or working close to the site (apart from the operator and employees). There is potential for increased dust generation from permitted activities during prolonged dry periods e.g. summer months and windy weather.	Prevailing wind direction is south west predominantly throughout the year. Reduces probability of exposure to schools and indusatrial areas. Delay tipping of inert material when very windy and follow dust emissions management plan. The site is not located within an AQMA designated for PM10.	Low

Local human population	As above	Nuisance - dust on cars, clothing etc.	Air transport then deposition	High	Low	**Medium**	As above. Local residents often sensitive to dust.	As above	Low
Local human population, livestock and wildlife.	Litter	Nuisance, loss of amenity and harm to animal health	Air transport then deposition	Low	Low	**Low**	Local residents often sensitive to litter, however permitted waste types have low litter potential.	As above. Appropriate measures could include clearing litter arising from the activities from affected areas outside the site.	Very low
Local human population Residential-200m SW, 300m E, 700m W. Commercial- 260m W, 560m E. Schools- 600m and 850m E, 1.2km	Waste, litter and mud on local roads	Nuisance, loss of amenity, road traffic accidents.	Vehicles entering and leaving site.	Medium	Medium	**Medium**	Road safety, local residents often sensitive to mud on roads.	As above. Appropriate measures could include clearing waste, litter and mud arising from the activities from affected areas outside the site.	Low
Local human population	Odour	Nuisance, loss of amenity	Air transport then inhalation.	Low	Low	**Low**	Local residents often sensitive to odour, however permitted waste types have low odour potential.	Controlled by waste acceptance procedures. Check for odour, visual checks. Prevailing wind is SW predominantly throughout the year so reduces probability of exposure to Schools, Industrial and Commercial.	Very low
Local human population	Noise and vibration	Nuisance, loss of amenity, loss of sleep.	Noise through the air and vibration through the ground.	Medium	Medium	**Medium**	Local residents often sensitive to noise and vibration	Vehicle movements closely monitored.	Low

Local human population	Scavenging animals and scavenging birds	Harm to human health - from waste carried off site and faeces. Nuisance and loss of amenity.	Air transport and over land	Low	Medium	Low	Permitted wastes unlikely to attract scavenging animals and birds but may become nesting / breeding sites.	Controlled by waste acceptance procedures- visual checks.	Very low
Local human population	Pests (e.g. flies)	Harm to human health, nuisance, loss of amenity	Air transport and over land	Low	Medium	Low	Permitted waste types unlikely to attract pests.	As above	Very low
Local human population and local environment	Flooding of site	If waste is washed off site it may contaminate buildings / gardens / natural habitats downstream.	Flood waters	Medium	Medium	Low	Permitted waste types are inert so any waste washed off site will add to the volume of the local post-flood clean up workload, rather than the hazard.	Management system identifies and minimises the risk of pollution including those arising from operations, maintenance, accidents, incidents, non-conformances. Flood risk assessment completed 2022-identifies risk of gorundwater flooding and from pluvial sources is low. Wash plant does not increase surface runoff.	Low
Local human population and / or livestock after gaining unauthorised access to the waste operation	All on-site hazards: wastes; machinery and vehicles.	Bodily injury	Direct physical contact	Medium	Low	Low	Permitted waste types are inert therefore only a low magnitude risk is estimated	Activities shall be managed and operated in accordance with the management system (will include site security measures to prevent unauthorised access).	Low

Local human population and local environment	Accidental fire causing the release of polluting materials to air (smoke or fumes), water or land.	Respiratory irritation, illness and nuisance to local population. Injury to staff or firefighters.	As above.	Low	Low	**Low**	As above.	As above (excluding comments on access to waste). Permitted activities do not include the burning of waste.	Low
All surface waters close to and downstream of site.	Spillage of liquids, leachate from waste, contaminated rainwater run-off from waste e.g. containing suspended solids.	Acute effects: oxygen depletion, fish kill and algal blooms	Direct run-off from site across ground surface, via surface water drains, ditches etc.	Low	Low	**Low**	Permitted waste types do not include sludges or liquids so only a medium magnitude risk is estimated. There is potential for contaminated rainwater run-off from wastes stored outside buildings especially during heavy rain.	All liquids shall be provided with secondary containment.... (applies to non- wastes such as fuels). Storage and treatment on an impermeable surface with sealed drainage or on hard standing. Waste accepted on site is non-hazardous.	Low
All surface waters close to and downstream of site.	As above	Chronic effects: deterioration of water quality	As above. Indirect run-off via the soil layer	Low	Low	**Low**	Waste types are non-hazardous and inert so harm is likely to be temporary and reversible.	As above	Very low
Abstraction from watercourse downstream of facility (for agricultural or potable use).	As above	Acute effects, closure of abstraction intakes.	Direct run-off from site across ground surface, via surface water drains, ditches etc. then abstraction.	Low	Low	**Low**	Watercourse must have medium / high flow for abstraction to be permitted, which will dilute contaminated run-off.	As above	Very low
Groundwater	As above	Chronic effects: contamination of groundwater, requiring treatment of water or closure of borehole.	Transport through soil/groundwater then extraction at borehole.	Low	Low	**Low**	Permitted wastes unlikely to contaminate groundwater.	As above	Very low

Cudworth Dike	Suspended solids and biological oxygen demand from the washing of soils/aggregates	Chronic effects: deterioration of water quality	Direct discharge of effluent into Cudworth Dike (storm/flooding conditions only) from wash plant	Low	Low	**Low**	Water treatment facility has interceptor and silt trap before discharging, dilutes any potential contaminated run-off. Waste types are non-hazardous and inert so poses no significant risk.	Effluent discharged from wash plant is sampled when required. Effluent probability of discharging into Cudworth Dyke - Only in storm conditions when wash plant site drainage tank overflow. Goes through interceptor and silt trap first so risk of suspended solids is low.	Low
Local human population	Contaminated waters used for recreational purposes	Harm to human health - skin damage or gastro-intestinal illness.	Direct contact or ingestion	Low	Medium	**Low**	Unlikely to occur, but might restrict recreational use.	Emissions Management Plan for monitoring and sampling.	Very low
Protected sites - European sites and SSSIs Dearne Valley Wetlands- 1000m N, Carlton Marsh- 200m NW	Any	Harm to protected site through toxic contamination, nutrient enrichment, smothering, disturbance, predation etc.	Any	Medium	Medium	**Medium**	Waste operations may cause harm to and deterioration of nature conservation sites.	Waste accepted is non-hazardous and as such poses no significant risk to habitats. In addition, operations will be carried out taking the sensitive nature of the SSSI and Local Wildlife Site into account.	Low

2.1 Dust Management

A Dust Emissions Management Plan is found in Appendix VI.
The potential for dust and particulate generation at the site will be addressed by adopting the following measures:

- There will be no acceptance of highly-dusty loads to the site.
- Incoming open top containers of waste will be appropriately covered or sheeted while in transit.
- Internal roadways will be damped down using a water bowser during adverse weather conditions to prevent dust arising from vehicle movements on site.
- We have a weekly visit with a road sweeper and this can be on call out on standby when required.
- All surfaces within the site and storage areas will be kept as tidy as possible to prevent accumulations of dust.
- Damping down of waste streams such as rubble and soils will take place prior to deposit to reduce dust generation.
- Dust suppression sprays are present on the machinery when this is required whilst processing materials.

Daily inspections of the site will be carried out to monitor for dust and will include a note regarding daily weather conditions on site. Subsequent remedial action will be recorded in the Daily Dust monitoring log which forms part of the Environmental Management System procedures. As the prevailing wind is from the South West any amount of residual dust that may be
generated will be directed away from any neighbouring receptors (Figure 3).

2.2 Noise Management

The Noise Management Plan and Noise Impact Assessment is located in Appendix VII.

The primary noise impacts from the site will result from visiting and departing vehicles and the plant and equipment used on site. However, it can be seen (Figure 2) that there are no sensitive receptors adjacent to the site boundary that might be impacted by any noise the levels generated on site are such that they are unlikely to be perceived outside the site boundary.

Care will be taken however when using plant & equipment to minimise noise levels. Noise will also be kept to a minimum by ensuring vehicle engines are switched off when parked and that loading shovels are fitted with appropriate acoustic shielding. Daily inspections of the site will be carried out to monitor for noise impacts in line with the Daily Noise monitoring procedure. Subsequent remedial action will be recorded in the Daily Noise monitoring log which forms part of the Environmental Management System procedures.

3. Plan Review
The Quality & Environmental Management Plan shall be reviewed at least annually by Sealquest Ltd. and subsequent to any changes in legislation, or as a result of non-conformances or other relevant incidents.

4. Roles and Responsibilities
Appendix II displays the companies organisation chart.

4.1 Facility Manager
The Facility Manager / Senior Manager for the site is responsible for the management and maintenance of SHEQ (Safety, Health and Quality) management systems and ensuring the communication of related Company policy and objectives (Environmental Policy Statement at Appendix I) . The SHEQ Manager, along with the Facility Manager or the Senior Manager responsible for the facility shall conduct periodic reviews of the system to ensure its continuing suitability and effectiveness. The facility manager shall be deemed to be the competent person in relation to the waste management operation and shall be trained in accordance with the CIWM / WAMITAB Operator Competence Scheme.

4.2 Operations Manager
The operations/ yard manager is responsible for ensuring the day-to-day implementation of the Management System. Given the nature of the activities, together with the site location, the main site management/ environment risk lies with dust migration via the air pathway. As a consequence a stand-alone Dust Management Plan supports this management plan and ensures that procedures are complied with and that records are maintained to demonstrate both quality assurance and legal compliance.
All controlled waste transfer notes should be checked for legal compliance, in accordance with Regulation 35 of the Waste (England and Wales) Regulations 2011, and should be retained for a period of at least two years from the date of issue. Where using annual controlled waste transfer notes ('season tickets') the two year retention period will relate to the last day of the season ticket period.

Where site operatives report issues (as identified in 4.3 – below) he/she should ensure that site operations are conducted in a way that ensures that environmental impacts are reduced to the extent possible and that in the case of contaminated loads, that these are rejected and that related transferors are informed of the reason for rejection.

4.3 Site Operatives

Site Operatives are responsible for carrying out tasks as detailed by the Yard Operations Manager, and Personnel performing work which 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, H&S and environment objectives.

They should as a minimum:
• Be aware of environmental/ nuisance hazards to the surrounding environment (e.g. dust/ surface run-off) and where there is a related risk, this should be reported to the operations manager;

• Be vigilant against the presence of contaminating materials in loads delivered to site and should report such contamination to the site manager, and where possible quarantine any contaminated material pending further action.

5. Control of Raw Materials

For the purposes of the Environmental Permitting, the amount of waste that can be received at the facility will be increased to 150,000 tonnes per annum.
Deliveries of inert wastes will be restricted to the operational capacity of the site and will only be accepted if there is sufficient storage capacity within the designated areas of the site.

The yard facilities and all operations therein, shall be under the control of the Yard Operations Manager (See Organisation Chart – Appendix I).
Incoming waste materials and processed product should be clearly segregated to prevent any cross contamination and thus ensure compliance with relevant QP standards.
Upon arrival on site, controlled waste transfer notes/ season tickets are checked at the weighbridge to ensure that the site permit allows for receipt of the wastes on site. Visual inspection of incoming raw materials to check compliance with the waste description on the controlled waste transfer note/ season ticket is undertaken by the site operatives as described in 4.3 (above).

5.1 Suppliers
All new suppliers are sent specifications and tolerances of the materials that the site is allowed to accept for processing. Where applicable, a visit to the suppliers' operations / site will be organised to ensure that practices and procedures are such that there is confidence of the quality of material provided such that the related description and documentation can be relied upon.

5.2 Incoming Arisings (Duty of Care Controls)
As part of the standard operating procedures, the following activities are undertaken to ensure compliance with Duty of Care controls.

The material supplier must be able to demonstrate that he/she is a legally- authorised person. This will normally mean that they are either

- a waste management permit holder or exempt from the need to hold a permit; and/or they are
- a registered Waste Carrier/ Broker Dealer.

In the case of registered carriers/ brokers/ dealers evidence of registration will be sought as part of standard pre-acceptance checks.
All arising's delivered to the facility shall be accepted only if accompanied by a Waste Transfer Note/ season ticket containing the information specified within Regulation 35 of the Waste (England and Wales) regulations 2011, especially:

- Date;
- Description of Waste;
- EWC Code;
- SIC Code;

- Waste Hierarchy Declaration;
- Place of origin;
- Quantity, tonnage and how contained;
- Carrier's details including address and registration number;
- Brokers/ dealers details if used;
- Producer's details including address;
- Signatures of each party to the transfer

All incoming arisings will be visually inspected by a competent person to ensure they are of an acceptable quality for use in the process. Only the materials conforming to the European Waste Catalogue (EWC) Classifications as identified within Table 1. shall be accepted:

Incoming materials that comply with Duty of Care procedures (above) are tipped within the dedicated storage area. Every effort shall be made to ensure that the material for processing is free of any contaminants such as wood, plastic, metals etc. and this is done as described in 4.3 (above).

A log shall be maintained of all deliveries and a note made if the delivery is rejected. All waste transfer notes shall be retained for period of at least 2 years.

6. Plant, Equipment and Infrastructure

6.1 Maintenance

Plant and equipment has been chosen to be fit for purpose, sourced and maintained in accordance with manufacturers' instructions. The primary pieces of plant and equipment on site are:

- The site weighbridge.
- Front-end loading shovel used for general loading and unloading operations and keeping the site in a good state of order enabling operations to continue in an organized manner.
- Screen and mobile crusher to process incoming inert excavation and demolition wastes.
- Supporting skip wagons fitted with up to date technology
- 360 Excavator
- Willibald shredder
- Wash Plant

In the event of any breakdown of plant or machinery, such that operations have to cease, then deliveries of waste to the site will be restricted to ensure compliance with the Environmental Permit conditions. If on site repairs to such plant and machinery are not possible, replacements will be brought onto site until repairs are effected.

6.2 Calibration

Any Test and Calibration equipment shall be maintained and serviced in accordance with manufacturers' instructions.

6.3 Site Security

The site is bounded by a 3 metre concrete block fencing or 2.5 meter palisade fencing. Access to the site is West Green Way. The site boundary fencing will be inspected on a weekly basis and logged in a maintenance log. Any repairs will be carried out within 7 days of being reported.

During hours of operation access is through the main gate and onto site via the manned weighbridge. The Yard/ Operations Manager conducts a monthly walk around of the site to check the condition of perimeter fences. A site identification board will be displayed at the entrance to the site located off West Green Way.

The board will state the:

- Name and address of the site
- Environment Permit number
- Name and address of the site operator/Environment Permit holder
- Telephone number for the site during opening hours
- Telephone number for site out of hours contact
- Telephone numbers of the Environment Agency, including national numbers: 03708 506 506 and 24 incident hot line 0800 80 70 60
- Hours of operation

The site identification board will be inspected on a monthly basis as part of the ongoing site maintenance schedule. Any damage will be reported in appropriate log and any repairs will be carried out within 7 days of being reported.

6.4 Site Infrastructure

All working surfaces at the site will be constructed from engineered, rolled stone aggregate hardstanding, while in order to reduce the risks of material/soils being carried off-site, the main access to the site off Burton Road will be surfaced with hot rolled tarmac.
However, should any mud be deposited on the highway as a result of the waste management operations on site, a mechanical road sweeper will be hired and employed immediately to remove the offending material. If mud generation continues to be an ongoing problem then operations will be stopped until appropriate remedial action can been taken.

Daily inspections of the site will be carried out to monitor for mud and debris problems in line with the Daily Mud and Debris monitoring procedure. Subsequent remedial action will be recorded in the Daily Mud and Debris monitoring log which forms part of the Environmental Management System procedures. In addition, a weekly inspection of all site surfaces will take place as part of the ongoing site maintenance schedule. Any damage will be reported in an appropriate log and should circumstances require any surface area in need of repair will be reengineered to the original specification.

7.0 Processing of Raw Materials

7.1 Pre-Use Checks

Prior to loading material into the processing plant from the storage area it is inspected to ensure that it is free from non-conforming materials that may damage equipment or

compromise product quality.

7.2 Wastes Processing

All arisings to be utilised in the production of the QP-approved product shall be crushed, where necessary and otherwise screened to a specification using plant on site. Appendix III provides further details on the sites Quality Protocol for Production of Recycled Aggregates. Quality aggregates are produced for a range of purposes in the building and construction sector. The high-spec plant ensures the ability to meet growing demand for sand and aggregates from a sustainable source, in line with circular economy principles. It also allows the company to reduce their carbon footprint in that processing operations are achieved closer to the market.

7.3 Storage of Processed Material

Material that has been processed shall be stored and maintained in such a manner as to prevent any deterioration from the relevant standard or specification and in such a way as to avoid cross-contamination. This is achieved through storage in discrete and demarcated areas of site from which product can be loaded onto vehicles for transport off-site.

Material that has been processed and is awaiting any test result shall be segregated from any other processed material until such time that the test results are returned.

8. Testing

8.1 Testing Laboratories

We have a service level agreement in place for all our testing requirements this is carried out by.

Construction Testing Solutions Ltd
Bootham Lane Industrial Estate
Bootham Lane
Dunscroft
Doncaster

West Yorkshire DN7 4JU
Tel +44 (0) 1302 352700

In all cases, the testing laboratory shall state the test used (ie BS/EN test reference) on the test certificate, with the test result for the sample. Results for testing are used to prove the suitability of materials for re-use, in-line with the concept of the circular economy and sustainable wastes management, and as approved by the Yorkshire Highway Authorities and Utilities Committee (YHAUC) Framework agreement (attached as a separate document) with reference to the Specifications for Reinstatement of Openings in Highways, Manual of Contract for Highway Works and the Specification for Highway Works.

8.2 Failures/Non-Conforming Product
Material that has failed a test shall be deemed to be a non-conforming product and the yard operations manager shall determine any corrective actions that need to be implemented to meet required specifications for non-waste status.
Non-conforming aggregate products will still be classed as waste as they will not have met the end of waste criteria and complied with the appropriate specification. Non-conforming product may be returned to the stock pile for re-processing or sent to a relevant waste management facility, depending upon the nature of the failure.

9. Training and Competency
All training shall be managed in accordance with legal requirements as a minimum.
The site operational activities shall be conducted under the supervision of a 'Competent Person' who shall be trained in accordance with the CIWM / WAMITAB Operator Competence Scheme.
It is envisaged that the following tasks are critical for Heath, Safety, Environment and Quality management of the process:

9.1.1 Waste Acceptance

- Types of waste that can be accepted
- Types of waste that must be rejected
- Visual inspection
- Classification
- Segregation of incoming spoil
- Sorting of waste (pre-treatment)

9.1.2 Environmental Site Management
- Pollution Control (Dust Emissions)
- Permits
- Discharge Consents
- Spillage control

9.1.3 Environmental Waste Management

- Non Hazardous waste
- Hazardous waste
- Fly tipping
- Guide to spillage control
- Environmental risk assessment

9.1.4 Health and Safety

- General HSE training
- Working at heights
- Machinery/equipment operations
- Loading
- Site inspections
- Visitor induction and control

- PPE

9.2 Training Record
Each member of staff will have an individual training record which will identify their training needs and renewal dates. Training records will form part of this Environmental Management System and will be maintained and updated on a continuous basis.

10. Monitoring
10.1 Incidents and Near Misses

All incidents and near misses shall be logged and reported in accordance with legal requirements, and any incident involving subsequent notification to Regulatory bodies will be escalated to Director level. Resulting actions will be agreed between the SHEQ team, Facility Manager and or the Yard Operations Manager.

10.2 Complaints
In the event of any external complaint being received regarding nuisance dust then details should be logged and the SHEQ team notified. All complaints shall then be dealt with in accordance with the site dust management plan. Complaints will be handled by the SHEQ team and where appropriate, investigated, corrective actions established, monitored and closed out in collaboration with the site manager.

11. Audit and Review

11.1 Internal Audits
The operation of the requirements of this Plan shall be subject to audit as part of the routine internal audit process.

11.2 Plan Audits

At a frequency not less than 12 monthly there shall be an internal audit of the operation of this Quality & Environmental Plan. This audit shall assess the effectiveness of its implementation within Sealquest Ltd.

11.3 Non-Conformance
All non-conformances identified during audit shall be handled on a risk-assessed basis and shall be logged and actions monitored to assure effective implementation.

11.4 Reviews
Relevant site managers shall, in conjunction with the SHEQ Manager review the process at least once every 12 months. Areas for discussion at the Review shall include the following:

- Internal and external audit reports
- Operational matters
- Suppliers performance
- Complaints and adverse trends

- Target areas for improvement and methods of measurement

The Review Meeting shall be minuted for future reference and review.

11.5 Records
All records relating to audits and quality reviews shall be retained by Sealquest Ltd. for a minimum of 6 years. All Waste Transfer Note shall be retained for minimum of 2 years.

12. Contingency/Emergency Planning
12.1 Plant Breakdowns

Where a breakdown affects the key operation, such as the screening or wash plant, then the receipt of incoming material shall be assessed and stopped as appropriate. Where the breakdown affects the long term operation of the process then any untreated or partially treated material that has not met its end of waste criteria would be removed and disposed of at an alternative licensed waste recycling centre. Where a breakdown affects a control measure of the permit conditions, such as dust suppression measures then the operation shall cease until a replacement can be hired or repairs completed.

12.2 Closure
Closure of the site operation activities would have minimal environmental impact and any untreated or partially treated material that has not met its end of waste criteria will be disposed of as waste in accordance with regulatory controls.

Appendix I- Environmental Policy Statement

E J lidster (Construction) Ltd. is committed to leading the industry in minimising the impact of its activities on the environment.

The key points of its strategy to achieve this are:

- Minimise waste by evaluating operations and ensuring they are as efficient as possible;
- Minimise emissions through the effective control of emissions from site activities, the selection and use of its fleet and the source of its power requirement;
- Actively promote recycling both internally and amongst its customers and suppliers;
- Source and promote a product range to minimise the environmental impact of both production and distribution;
- Meet or exceed all the environmental legislation that relates to the Company;
- Provision of a training program for its staff to raise awareness of environmental issues and enlist their support in improving the Company's performance

Appendix II- Company Organisation Chart

Anthony Lidster – Managing Head Office Operations

Harvey Lidster – Managing West Green Depot Production & Operations

Fred Taylor – Transport & Waste returns based at Head Office

Shane Bateman – West Green crushing and screening Plant Supervisor

Adam Whittaker – Machine Operator – Production of type 1 and Crushing & Screening of Aggregates

Robert Lee - Machine Operator – Production of type 1 and crushing & Screening of Aggregates

Quality Protocol for Production of Recycled Aggregates

Contents

Foreword

E J Lidster Ltd and associated companies have been operating over 30 years undertaking all aspects of ground works for the region's councils and utilities companies. The company operate to the highest environmental standards and manage operations as sustainably as possible, minimising waste and maximising use of recycled materials.

E J Lidster Ltd are producing this quality protocol which is to be used in accordance with the Environmental Management System (EMS) that is already in daily use. Copy attached for reference.

West Green Recycling

As part of their operations E J Lidster Ltd recycles inert waste into Type 1 unbound sub base to meet the specifications of Highways Authorities and Utilities Committee (YHAUC) and Highways Agency with reference to the Specifications for Reinstatement of Openings in Highways, Manual of Contract for Highway Works and the Specification for Highway Works.

To provide clients with assurances that the recycled materials produced meet the appropriate requirements Complete Utilities Ltd has developed this Quality Protocol, in accordance with the Waste & Resources Action Programme (WRAP) guidelines.

West Green Recycling

ROLLS & RESPONSIBILITIES

Anthony Lidster – Managing Head Office Operations

Harvey Lidster – Managing West Green Depot Production & Operations

Fred Taylor – Transport & Waste returns based at Head Office

Shane Bateman –-West Green Crushing and screening Plant Supervisor

Connor Simpson – Machine Operator – and Crushing & Screening of Aggregates

Robert Lee - Machine Operator – Production of SMR and crushing & Screening of Aggregates

1.0 Production Site and Products

1.1 Site of Production

This Quality Protocol has been produced for the production of recycled aggregates by E J Lidster Ltd at their site at West Green, Barnsley, South Yorkshire.

1.2 Regulatory Details

1.2.1 Planning Permission

Planning permission reference B/92/1021/64 granted on the 28th Jan 1993 for the recycling of inert wastes at west green.

1.2.2 Waste Regulation

Sealquest Ltd hold a standard rules permit SR2008 no11 EPR/AP3390ZY.

1.2.3 Waste Carrier Details

E J Lidster sales Ltd is a registered waste carrier, registration no. CBDU344218

1.3 Products

1.3.1 The recycled aggregate products produced at West Green are:

1. Type 1 Unbound Sub base YHAUC

2.0 Acceptance Procedures

2.1 To ensure that only inert materials suitable for recycling are accepted on site the following procedures will be maintained at West Green.

2.1.1 Demolition waste /Asbestos – Acceptance any demolition waste will be by prior consent and will require an asbestos removal completion certification prior to acceptance. Clean hardcore accepted only.

2.1.2 Excavated waste / asbestos – in the event of a suspected asbestos containing load, it would be quarantined in the rejected load area and subject to a discussion with the company responsible for the load and an asbestos test carried out with CTS under the SLA and a resolution to the issue carried out with the company.

2.2 Vehicles arriving at the site with material shall only be accepted with a completed Waste Transfer Notes.

2.3 **Non-hazardous Waste Acceptance Procedure:**

1. On arrival the site operator will check the waste transfer note complies with the permitted EWC. Noncomplying waste will not be accepted, and the vehicle should leave without depositing its load.

The Waste Transfer Note must detail:

• the name and address (including postcode) of both the person transferring (transferor) the waste and the person receiving the waste (transferee),

• the date and place (including postcode) of the transfer

• state if the transferor is the producer of the waste

• state if the transferor is the importer of the waste

• describe the type, composition and quantity of the waste being transferred and how it is contained

• 6 digit code for the waste

• SIC code for the activity carried out by person/ organisation transferring the waste.

2. The load will then be visually inspected by the site operative to ensure it complies with the description and European Waste Category coding. The site operator will then undertake a visual inspection to confirm the load complies with the waste transfer note description and coding and also that there are no visible amounts of foreign materials.

   Any loads which do not conform to the description or coding will not be accepted and the vehicle should leave without depositing the load. A Rejection Notice will be completed and given to the driver or supplier with a copy kept by the company. The rejection notice shall state why a load was rejected for processing detailing the reason for non-compliance, e.g. wrong European Waste Category code, excessive levels of foreign materials etc.

3. When a load is accepted, the vehicle will then be directed over the weighbridge and a weighbridge ticket issued. The vehicle shall then be directed to the storage area to deposit its load.

4. At the storage area loads will have a further visual inspection. The inspection shall confirm that the deposited load complies with the waste transfer note description and EWC coding and also that any visible amounts of foreign materials do not exceed the maximum tolerances of 1%. Unsuitable deposited loads not meeting the acceptance criteria will be rejected and a rejection notice completed. The rejected load will either be directly reloaded and removed from site or placed in the quarantine area for later removal from site.

5. For all accepted loads the Site Operator shall retain a copy of the Waste Transfer Note. Waste Transfer Notes, Weighbridge Tickets and Rejection Notices shall be kept in the main office for a minimum period of 6 years.

2.4 Accepted European Waste Categories Material which complies with the following European Waste Category (EWC):

INSERT ONCE PERMIT VARITION APPROVED

2.5 Foreign Materials

Foreign Materials include wood, plastics, asbestos, rubber, metal, plaster, organic material. The maximum acceptable level of foreign material in any load is 1%.

2.6 Suppliers

2.13.1 All suppliers will be informed of the Waste Acceptance Procedures to ensure that they only supply acceptable material. They will be informed that if they supply unsuitable loads which do not conform to the Waste Acceptance Procedures their material will be rejected and not accepted on site.

2.13.2 Suppliers need to demonstrate that they are a registered Waste Carrier.

3.0 Factory Production Control System

3.1 Administration and Responsibilities

3.1.1 Management

The responsibility for maintaining the EMS and QAP will be held by the Managing Director. Direct responsibility for the daily operations under the EMS and QAP will be the Recycling Site Manager.

3.1.2 Management (Managing Director) will undertake an annual review of the EMS as appropriate in response to changes in aggregate specifications, legislation, and use of new plant or production techniques. The purpose of the review is to ensure that the Quality Protocol is operating effectively with the production of a consistent quality recycled product. In addition, there will be 6 monthly internal audits by the Recycling Site Manager which will include the review of all test result data.

3.1.3 Management (Office Manager) will ensure that the Quality Protocol, and any updates or reviews, is communicated to all staff involved in the production of the recycled aggregate products. A full and up to date copy of the Quality Protocol will be kept on site and at the main office at all times.

3.1.4 The Office Manager will be responsible for maintaining all records relating to the production of recycled aggregate covering:

- Waste Transfer Notes
- Weighbridge Tickets
- Register of Deliveries
- Rejection Notices
- Test Sampling and Result Records
- Mobile plant maintenance and inspection records

3.1.5 Operational Staff

All members of staff involved in any stage of the production of recycled materials will be fully conversant with the contents of the Quality Protocol. Site staff will be given training by the

Recycling Site Manager in respect of their duties under the FPC and will be responsible for implementing the FPC as relevant to their daily work activities.

3.2 Method of Production

3.2.1 A flow diagram of the main steps in the Method of Production is provided in Appendix C.

3.2.2 After acceptance of materials in accordance with the details outlined in section 2 above, materials will be deposited in the unprocessed material storage area, see schematic layout plan.

3.2.2 In accordance with the waste acceptance procedures mentioned in section 2 above, reject loads not immediately removed from site will be placed in the Reject Area. Material in this area will be kept separate from all other stockpiles of materials to avoid any cross contamination.

3.2.3 The site operator will examine the deposited material in the storage areas and remove any foreign material by hand. A bin will be maintained on site for the storage of any such material prior to its removal from site to an appropriate disposal site.

3.3 Processing

3.3.1 Stockpiles of Material to be Processed

All material which has been accepted on to site will be stockpiled prior to processing. Stockpiled materials shall be inspected on a daily basis by the site staff to ensure there are no issues that could affect product quality. The inspection will look at conditions such as contamination or moisture levels. Where the condition of the stockpile is such that the material would not be suitable for processing it shall be removed to the reject area and the details of the rejected material recorded.

Figure 1: Schematic Layout of Processing Operations at West Green Recycling, Barnsley

3.3.2 Material will be removed from the stockpile and processed through the Mccloskey screener. The screened material grid will be fed into the Kleeman impact crusher with suitable 45mm impact deck grids. The oversize from the screen will be sent over the side belt and passed back into the crusher until suitable size and grading is achieved.

3.4 Production of Type 1

3.4.1 The material from the Kleeman mc110 impact crusher will be stockpiled in the relevant bay ready for testing.

3.5 Testing

Product testing shall take place in accordance with the testing regime outlined in section 4 below.

3.5.1 Production Records

To be made available if /and when required by YHAUC.

3.6 Non-Conforming Products

The site manager shall be responsible for inspecting products on a daily basis. Where appropriate 'non-conforming' products may be directed for reprocessing or rejected to the reject area. Where it is necessary to take corrective action for non-conforming products, including delivered product found to be non-conforming, details will be fully recorded. The site manager shall review the processing operations and take actions as necessary to address the problems.

3.9 Storage of Product

Each product shall be clearly marked and kept separate from other products and materials to prevent contamination. The site manager shall inspect all stockpiling areas on a daily basis and where there is any issue affecting product quality, e.g. cross contamination or excessive moisture levels, corrective action shall be taken as appropriate e.g.
reprocessing or rejection of product.

3.10 Supply of Recycled Product

All vehicles collecting product shall first be weighed on arrival and data input into the electronic weighbridge system. They will be advised on the location of the loading area. The site operator will load the product and then the truck will return onto the weighbridge. The vehicle will be weighed again and the weight recorded. At this point an electric weighbridge ticket is produced and signed by the operative once details are checked.

3.11 Training

All personnel involved in the process will be trained to conform with the Protocol and other relevant legislation held within the EMS. All training records will be kept and maintained at the general office. Only suitably qualified and trained staff will be allocated assigned tasks in the Protocol.

4.0 Testing Regime

4.1 E J Lidster Ltd have a service level agreement in place with Construction Testing Solutions, Bootham Lane, Doncaster, DN7 4JU the testing regime has been developed reflecting the nature of the waste materials accepted and the rate of throughput at the site. Product performance compliance testing will be carried out at varied frequencies depending on the product and test. A test schedule will be prepared and maintained by the office manager and a copy kept on site.

4.2 Daily product records will be kept by the site operatives, CTS will be called in for testing in accordance with the test schedule. All sample test results will be recorded and sent electronically to E J Lidster and uploaded to the YHAUC website.

4.3 The sampling, including the preparation of samples, shall be undertaken by CTS with the samples sent to a UKAS accredited laboratory. Results of the testing will be kept at the general office and the site manager shall undertake a review of the test results every six months.

4.4 To ensure the product specifications comply with the current YHAUC specification the testing regime has been developed taking account of the guidance for these materials. Details of the tests and testing frequencies are provided below.

4.5 Testing Regime for Type 1

Service Level agreement with CTS in line with YHAUC regime
Previous test results in attached document from CTS schedule 18114

5.0 Plant, Equipment and Stores

5.1 The mobile plant used to process material includes:

- Mccloskey R155 3 Way screener
- Kleeman MC110 impact Crusher
- Barford Conveyor stacker
- Extec Finger Screener
- Loading Shovel
- 360^0 excavators

5.2 Additionally, other hand tools and equipment, including sample bags, will be kept on site and stored in the maintenance shed.

5.3 The site manager will be responsible for ensuring all plant is maintained in a good working condition with regular inspections, testing and maintenance undertaken in accordance with manufacturer's specifications and a maintenance schedule, see EMS attached for the maintenance checks carried out.

6.0 Documentation

6.1 The following documentation shall be maintained as part of the Quality Protocol procedures

- Waste Transfer Notes
- Weighbridge Tickets
- Register of Deliveries
- Rejection Notices
- Production Records
- Non-Conforming Records
- Sampling Result Records
- Weighbridge test records
- Mobile plant maintenance and inspection records
- Waste Exemption Registration

6.2 Record Keeping

All records shall be kept by the Head office for a minimum period of three years. All records shall be made available to the customer on request.

Appendix A

Rejection Notice

Recycling Depot Address
West Green Depot
West Green Recycling
West Green Way
Barnsley
S71 5SN

The waste load has been deemed as failing the acceptance criteria for recycling aggregates.

Customer delivering load:
Company contact advised of load failure:
Date:

Details of Load

Date:	**Time:**
Name:	**Signed:**

Comments/Reason for Rejection:

***Copy for Supplier and One copy for company records*

Complaints Procedure

On receipt of a complaint the recycling Facility will log the complaint in the table below. All relevant personnel will be notified of the complaint where it will be assessed and the relevant corrective actions taken. The flow charts detailed below can assist in the process of identifying the cause of the complaint if required.

Date	Description of Complaint	Details of Complainee	Actions Taken	Complaint level (minor/moderate/ high)

Appendix B
Weighbridge ticket sample

E J LIDSTER BARNSLEY

PO/ 4214873

HEAD OFFICE
E.J. LIDSTER (SALES) LTD
ARUNDEN HOUSE
LUND LANE
BURTON GRANGE
BARNSLEY
S71 5PA

www.lidsters.co.uk
Tel No. 01226 298484
Fax No. 01226 248500
info@lidsters.co.uk

WEST GREEN DEPOT
E.J. LIDSTER (SALES) LTD
WEST GREEN RECYCLING
WEST GREEN WAY
BARNSLEY
S71 5SN

CONVEYANCE NOTE

IN TRANSACTION — **Ticket No** 71628

Customer / Supplier	RECONOMY LTD RADFORD HOUSE STAFFORD PARK 7 TELFORD TF3 3BQ	Destination / Site	
Order No.	4293	Source	WEST GREEN
Vehicle	YK19 WIZ	Contract No.	
Driver	STEVE DAVIS	Waste Carrier No.	CB/PP3819DH
Haulier	MORRISON UTILITIES	Serial No Dirt	Date 2-Apr-20
			Time 11:02

Product	Description	Count	1st Wt	Tare	2nd Wt	Nett
TIPPING 170504	INERT TIPPING			16,000	31,460	15,460

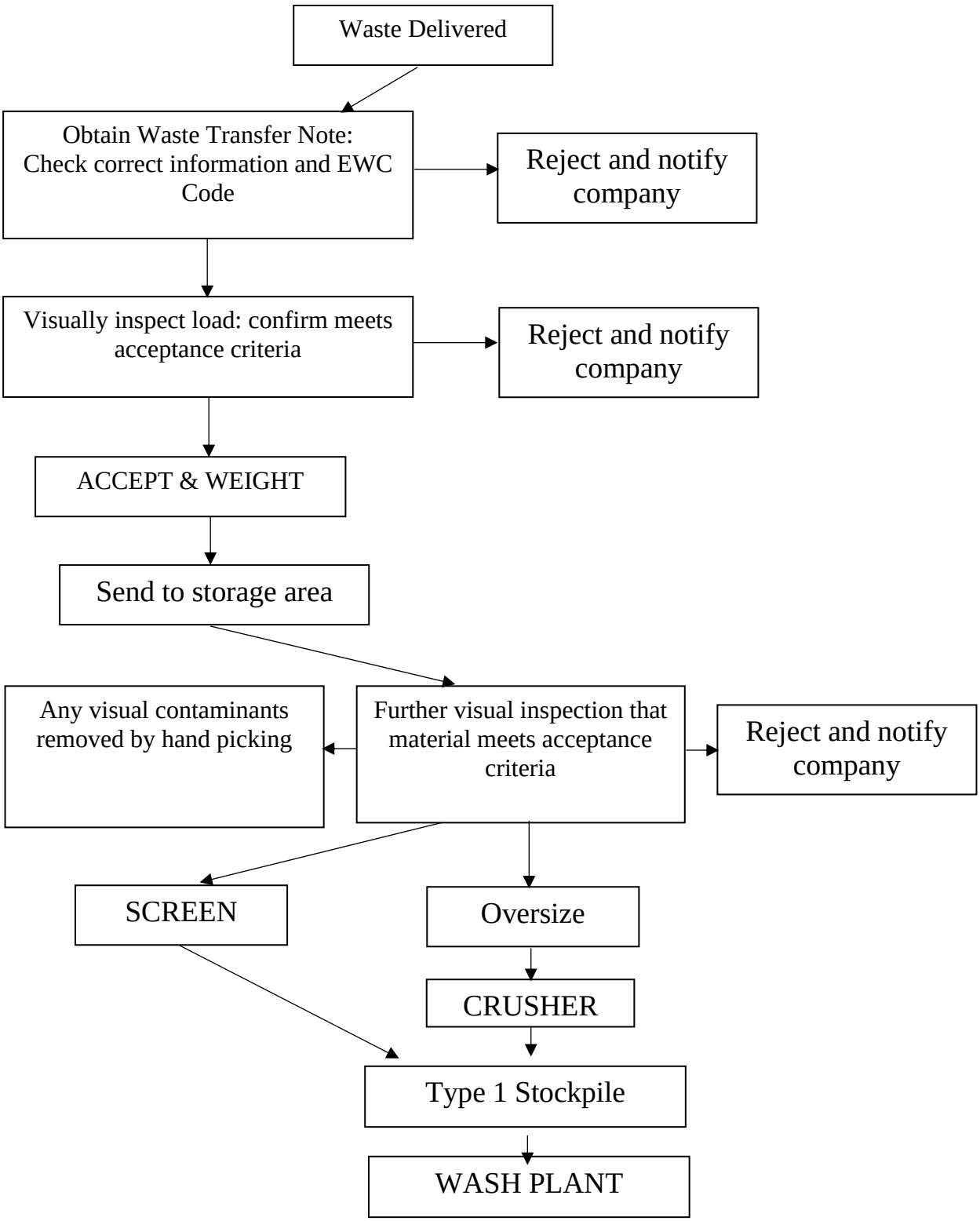
Signed _____ Print _____

VAT No. 180993784
CO REG No. 08443154

SIGNATURE OF PURCHASER OR HIS SERVANT HAVING RECEIVED ABOVE CONSIGNMENT

Method Of Production Diagram

Appendix C



West Green Recycling

Appendix D
DAILY MAINTENANCE CHECKS
LIST 1

DAILY MAINTENANCE REPORT

WEEK COMMENCING _____ 2023

ACTIVITY: WEST GREEN RECYCLING CENTRE

√	DAILY
W	WEEKLY
O	NOT DONE
X	DEFECTIVE
Enter Code Applicable	

SITE/ EQUIPMENT DAILY CHECKS

ITEM NO.	PLANT DESCRIPTION	EXAM FREQ.	MON	TUE	WED	THU	FRI	SAT	SUN
	PRE-SHIFT SAFETY CHECK								
EJL 1	Doosan DL 350 SHOVEL	Daily							
EJL 2	CAT 320D EXCAVATOR	Daily							
EJL 3	Doosan 450 SHOVEL	Daily							
EJL 4	BELL L2606E SHOVEL	Daily							
EJL 5	Doosan 360 DX 225	Daily							
EJL 6	Doosan 360 DX 225	Daily							
EJL 7	MERLO FORKLIFT	Daily							
EJL 8	KLEEMAN MOBITRACK IMPACT CRUSHER	Daily							
EJL 9	MDS MOBILE TROMMEL – SCREENER	Daily							
EJL 10	BARFORD TR65 36 STACKER BELT	Daily							
	SITE SECURITY / GATES	Daily							
	SITE CABINS	Daily							
	SITE STORAGE OF MATERIALS	Daily							
	WASH PLANT								
	Signature (daily) >								

NOTE: - REPORT OVERLEAF →

EXAMINERS NAME: _____ SIGNATURE: _____

_____ _____

E J LIDSTER SALES LTD

DAILY MMAINTENANCE CHECKS LIST 1

DAILY MAINTENANCE REPORT

WEEK COMMENCING 05/01 2023

ACTIVITY: WEST GREEN RECYCLING CENTRE

√	DAILY
W	WEEKLY
O	NOT DONE
X	DEFECTIVE
Enter Code Applicable	

SITE/ EQUIPMENT DAILY CHECKS

ITEM NO.	PLANT DESCRIPTION	EXAM FREQ.	MON	TUE	WED	THU	FRI	SAT	SUN
	PRE-SHIFT SAFETY CHECK								
EJL 1	Doosan DL 350 SHOVEL	Daily	✓	✓	✓	✓	✓		
EJL 2	CAT 320D EXCAVATOR	Daily							
EJL 3	Doosan 450 SHOVEL	Daily							
EJL 4	BELL L2606E SHOVEL	Daily							
EJL 5	Doosan 360 DX 225	Daily	✓	✓	✓	✓	✓		
EJL 6	Doosan 360 DX 225	Daily							
EJL 7	MERLO FORKLIFT	Daily							
EJL 8	KLEEMAN MOBITRACK IMPACT CRUSHER	Daily	✓	✓					
EJL 9	MDS MOBILE TROMMEL – SCREENER	Daily			✓	✓	✓		
EJL 10	BARFORD TR65 36 STACKER BELT	Daily							
	SITE SECURITY / GATES	Daily							
	SITE CABINS	Daily							
	SITE STORAGE OF MATERIALS	Daily							
	Signature (daily) >								

NOTE: - REPORT OVERLEAF →

EXAMINERS NAME: S BATEMAN SIGNATURE: ----------

S BATEMAN ----------

Appendix E

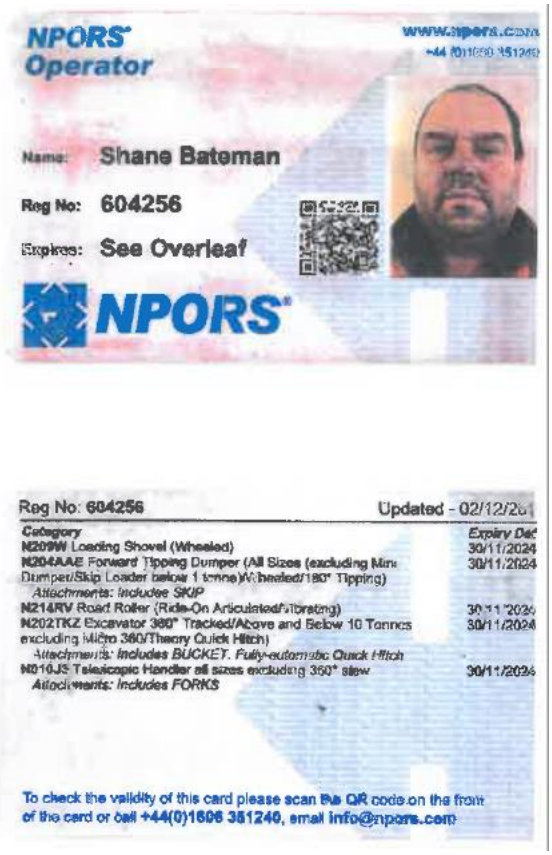
PAK SPRAY TESTING

Pak Sprays are used on our site to detect the presence of coal Tar

Site personal are trained via a Tool Box Talk on the use of Pak Spray.

Any material that reacts to the Pak Spray, changes colour, then rejected.

Appendix F
Training certification CPCS/ NPORS




CP Construction Plant
CS Competence Scheme
MR R. S LEE
Registration No: 01024186
Expires End: Aug 2023
HS&E TESTED
COMPETENT OPERATOR
The authenticity of this card can be checked by telephoning: 0844 8157274
Registration No: 01024186
PLANT OPERATOR
CATEGORIES
Excavator 360 below 10 tonnes - Tracked
Excavator 360 below 10 tonnes - Wheeled
Excavator 360 above 10 tonnes - Tracked
Excavator 360 above 10 tonnes - Wheeled
Wheeled Loading Shovel
Crusher
Screener
This card is issued in accordance with the terms laid out in the CPCS Scheme Booklet


CP Construction Plant
CS Competence Scheme
MR W S MANN
Expires End: Nov 2020
HS&E TESTED
COMPETENT OPERATOR
Excavator 360 below 10 tonnes - Wheeled
Wheeled Loading Shovel
This card is issued in accordance with the terms laid out in the CPCS Scheme Booklet

MR CONNOR SIMPSON

		EXPIRY DATE
NPORS		
N202TKZ	EXCAVATOR 360°	31/08/25
N204AAE	FORWARD TIP DUMPER	31/08/25
N214RV	ROAD ROLLER	31/08/25
S001A	CONST. SAFETY COURSE	31/01/26

Appendix IV- Aggregate Wash Plant Site Operating Procedures

EJ Lidster Ltd

Aggregate washing plant
Site Operating Procedures

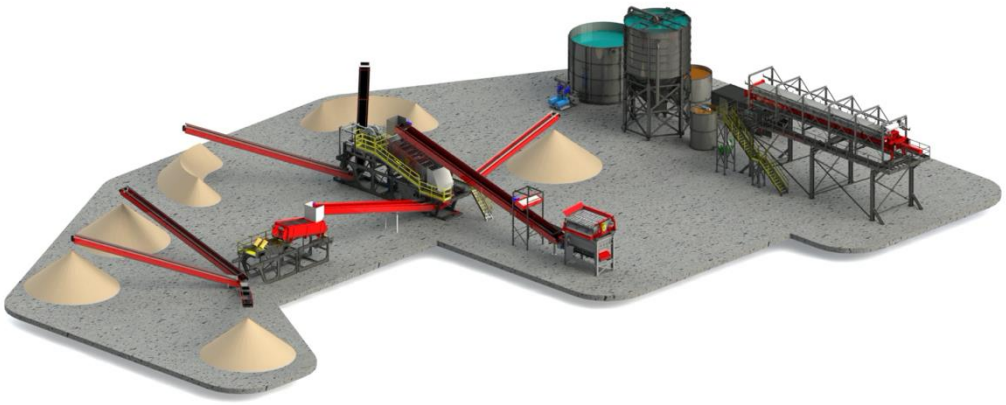
EJ Lidster Ltd
West Green

June 2023

Project Description

To design and build an enhanced Aggregate recycling facility to improve the performance of the facilities at West Green.

The scheme is to procure, install and operate an aggregate washing plant which will extract the sand and gravel fractions from the waste.



Simple schematic showing the concept

This significant investment will provide an alternative local source for sand, gravel and aggregates. These products have a lower carbon content, are based on recycled feedstock and will assist the clients in working towards circular economy principles.

The washing of difficult materials is a commonly used technology in mining and contaminated waste treatment. In recent years this has been applied to the C and D waste market
to good effect. The recycling rate from 'poor' materials can be upwards of 80% instead of currently disposing of the material in a landfill site.

West Green Recycling

The addition of water to the process in a closed loop (whereby the water is recycled within the plant) the clay and fine fractions within the material are liberated and separated. This involves several interlinked processes of washing, grading and separating. The fines are thickened and solidified utilising a plate press which produces a dry cake at the end of the process. This cake is the least valuable element but can be recycled as an engineering material or potentially mixed with organic matter to produce a topsoil. Only if other avenues of reuse cannot be found then the material will be located within landfill.

Analysis of typical materials presented at West Green shows that a significant amount of this material is recyclable and can produce viable and sustainable products.

West Green Recycling

Site Operating Procedure

Purpose of this Site operating procedure

This document details the safe operation of the new Aggregate wash plant facility currently under construction on the EJ Lidster, West Green site.

Scope

The document covers the plant from the aggregate feed hopper to the site material outputs.

Definitions

None.

Responsible Person

The Site is managed on a day-to-day basis by **Mr H Lidster**, who is ultimately responsible for the operation of the Wash Plant.

Contact Details

Name: Harvey Lidster
E mail: Harvj1970@gmail.com
Tel: 07767 880802

References

- Matec international Operating and Maintenance Manual
- Existing site operational working plan

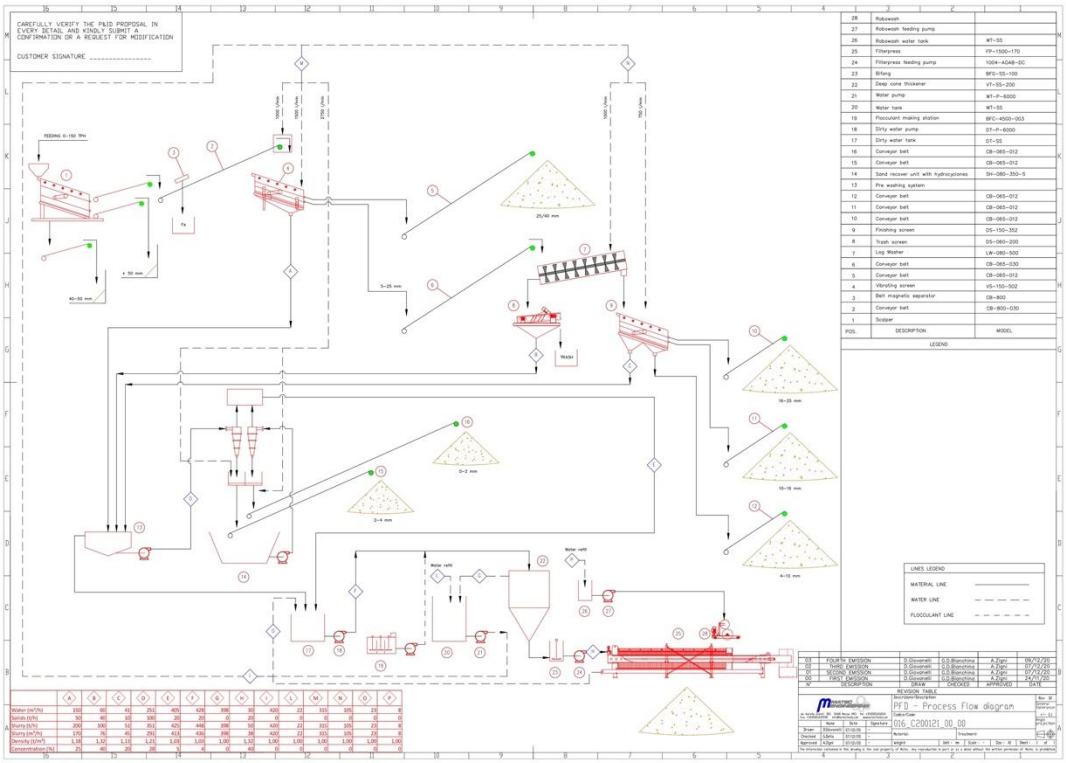
Process overview

This turnkey plant is supplied by a single supplier who designs the separate processing items to operate as one plant.
The plant can receive up to 150 tonnes per hour of mixed material and separate it into the following products:

1) 25/40 mm washed chippings
2) 16/25 mm washed chippings
3) 10/16 mm washed chippings
4) 4/10 mm washed chippings
5) 2/4 mm coarse sand
6) 0/2 mm fine sand
7) Filter Press Cake
8) Waste material for disposal (e.g. plastics wood, metals etc)

The quantities of each fraction produced is dependent on the mix of material entering the plant. The plant does not crush or modify any material it simply sorts the material based on particulate size whilst removing any foreign material.

The process flow diagram is shown below:



Plant Operation

Material Feed

Material is presented to the plant via a fixed feed hopper, this hopper screens out any oversize material and then allows the material to flow smoothly into the process. As soon as the material is presented on the feed conveyor belt an electromagnetic over band magnet picks up any ferrous metals present in the material and separates them into a separate skip to be recycled in the usual manner.

Gravel Processing

At the height of the conveyor the wash water is applied, and the material passed into the first process, the Aggretec machine. This machine vigorously *washes and vibrates the material allowing it to separate into different sizes. Any oversize material is prevented from moving forwards in the process. This machine separates the sands from the gravels. The gravels then pass forwards to the Log Wash where any organic (roots etc) and stubborn clays and soils are dislodged by the action of the paddles mounted on twin shafts and the water bath within the unit. After passing through this washer then the 3 grades of gravel are sorted on a vibrating 3 deck unit whilst getting a final clean via high pressure*

water. The fines from the log wash and this final wash are recycled back to the sand fraction holding tank. Once separated into the required sizing the gravels pass via individual conveyors to separated stockpiles ready for reuse.

Sand Processing

The sand and silts from the gravel processing and initial feed pass into the first process tank where floating contaminants are skimmed off and the water sand and silt are pumped into the first hydro cyclone. This fixed hydraulic separator separates the coarse sand from the mixture. The coarse sand drops into a dewatering screen and the fine sand and silts drop into a second tank. The coarse sand is dewatered and then passed up a conveyor into a dedicated coarse sand stockpile. The silt and fine sand is then pumped a second time into a second hydro cyclone where the fine sand is extracted. This sand is dewatered via a screen and then passes onto a conveyor into a separate fines stockpile.

Silt processing

By this stage all particulates equal to and greater than fine sand has been removed and the silts and clays are what remain. From the second hydro cyclone the silts and fines within this 'dirty water' pass via a second fine screen to make sure that any contaminations are removed. Then this water is pumped into the vertical classifier. As the dirty water is pumped into the classifier it is monitored for solids content via a real time optical sensor which then doses the relevant amount of flocculant to optimise the separation in the classifier.

Whitin the classifier the dirty water is pumped into the centre of the tank, the silts and clays fall to the base of the tank and the clean water is flows from the top of the tank back to the start of the process. The silts are fed via the conical base of the tank into a thickened silt tank.
The clean water is then re launched back into the washing plant maintaining the closed loop.

The Thickened silt is kept homogeneous with a tank mixer. When sufficient silt is in the tank it is pumped into one of two plate presses. The plate presses operate on a batch process cycle. When ready to accept a new batch of silt then the press closes, and the feed pump starts. The pump fills the 120 plates with silt and the water discharges through the filter plate this process cycle continues until the silt is dewatered to more than 90% dry solids. The water returns to the clean water tank for relaunching back into the process. With the cake dewatered the feed pump stops and the plates separate allowing the biscuits of silt to drop into the hopper for storage below the press house.

Plant Utilities

The wash plant is run off mains electricity, the water feed is from the bespoke site drainage collection tanks topped up with an adjacent borehole supply. The water from the drainage collection tanks undergoes treatment before being recirculated. The facility processes inert materials arising predominantly from works to the utility's infrastructure, the risk of any contaminated materials being inadvertently processed is extremely low.

It is proposed that sampling of the water from both the underground water tank and the surface water collection system is undertaken as follows:

- One sample from each location to be collected and analysed at a United Kingdom Accreditation System (UKAS) accredited laboratory

- 2 samples monthly for the first 3 months
- Subject to the results of the analysis
- 2 samples bi-monthly for the following 6 months
- Subject to the results of the analysis
- 2 samples quarterly thereafter

It is proposed that the analytical regime is agreed with the Environment Agency and would probably consist of Total Petroleum Hydrocarbons (TPH) including Benzene, Toluene, Ethylbenzene, and Xylenes (Mass Spectrometry) (BTEX (MS)), Heavy metals suite, Potential of Hydrogen (pH), Chemical Oxygen Demand (COD), Sulphate and Ammonia.

Due to these methods, the water will never go unsuitable for use.

The only other consumable is a water industry standard flocculant m
The only other consumable is a water industry standard flocculant material utilised to assist in thickening the cake prior to the press.

Start up and shut down procedures

To optimise the plant and minimise any issues the plant must start without any material in the process. The plant should operate for 20 minutes prior to material getting added.

Again, on plant shutdown the feed material should be stopped first and all decks and conveyors cleared before the plant is shut down.

Staff

The operation of a wash plant requires a high level of competence and coordination from all parties. The wash plant operator/manager must be fully trained and have the relevant experience in operating this and or similar processes. The staff shall consist of:

1) The Wash plant manager.
2) The machine driver for feeding the plant.
3) A wash plant operative to assist in cleaning, monitoring and checking the plant.
4) Maintenance resources.

Due to the abrasive nature of the material getting processed it is essential that a planned preventative maintenance culture is adopted.

As a minimum the plant maintenance and operational team shall:

1) Undertake daily checks prior to any processing.
2) Maintain the plant to the manufacturers schedule.
3) Always keep the plant clean and tidy.
4) Monitor the performance of the plant and review trends predicting any failures.
5) Maintain a sufficient stock of spares and consumables.
6) Make adequate records of performance, issues and incidents.

Site environmental performance

The operational team shall:

1) Make sure all plant is operating as designed.
2) A spill kit is always on site if hydrocarbon fluid leaks from a mobile machine or one of the presses.
3) Any incidents are recorded.
4) Site security is maintained and monitored.

Site Safety

The operational team shall:

1) Work within the health and safety guidelines of the site.
2) Never operate the plant without the correct machinery guarding and safety features in place.
3) Any incidents including near misses are recorded.
4) The appropriate PPE is worn at all times.
5) Sufficient lifting and access arrangements will be necessary to allow safe access for maintenance and operation.
6) Due to the complexity of the operation the site staff will need welfare facilities adjacent to the plant.

Operating times

The operating times will be the same as the existing site. As the plant is not crushing, or producing any dust and the plant is running off electricity the plant will not cause any nuisance issues to third parties.

Project Objectives and Measurement

To have an operational facility in place in the fourth quarter of 2023.

Appendix

Matec Brochure	**Washing**
Matec Brochure	**Frac Sand**

Appendix VI- Dust Emissions Management Plan

Contents

Appendices

1. Introduction

The 7.4-hectare site, known as 'West Green Recycling Yard', is situated at Land at Junction of Pontefract Road and Burton Road, West Green, Barnsley, South Yorkshire, S71 5SN. The site is in the metropolitan borough of Barnsley. Grid reference for the centre of the site is SE 37812 09034.

The site is located on former railway land with neighbouring land being utilised for agricultural, industrial and commercial uses. It is located between the residential settlements of Cudworth, Lundwood and Carlton and is adjacent to the disassembled former Cudworth railway line.

The site handles inert waste streams from the construction and demolition sector. The waste is currently treated by sorting, separation, screening and crushing. The screening of construction and demolition waste using crushers and screens produces a range of products which are sold off site to the construction industry. A permit has already been approved for these activities and the site has long standing planning permission for the waste transfer activities under planning permission reference B/92/1021/64 granted on 28th January 1993.

An aggregate washing plant is currently being installed on site to enhance the performance of the facilities at West Green which separates inert waste into aggregate, chippings, sand and silt/clay. These products will provide an alternative local source for these materials. Planning permission has been submitted for this activity. This Dust Emissions Management Plan (DEMP) will assist the permit variation application to include this treatment.

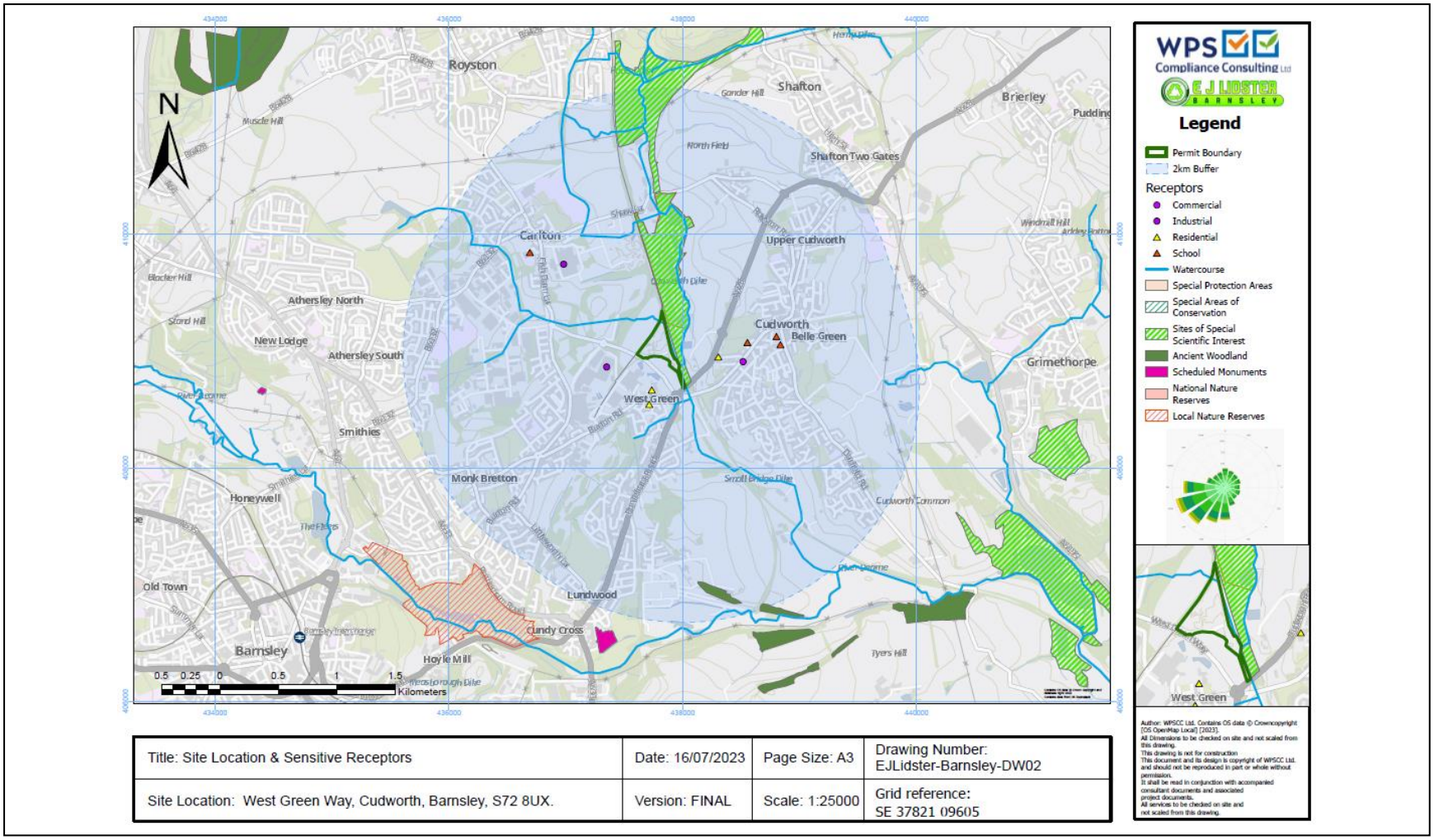
The site is located in an Air Quality Management Area for NOx (as NO_2). $PM_{10,}$ and SO_2 pollutants have not been declared as an air quality management area. The environmental risk assessment has identified dust as a low risk to environmental receptors with management controls in place. Therefore DEMP will accompany the permit variation application from a standard rules permit to a bespoke permit to ensure the minimisation of dust and particulate matter generation. The DEMP will identify the operations which have a potential impact upon air quality in the locality and detail the operational control measures which are implemented to minimise any impacts.

Once the permit variation has been granted, this dust management plan will form part of the site's environmental management system.

1.1 Sensitive Receptors

Habitat screening and receptors have been identified and show receptors up to 2km from the site as seen in Figure 1 which may be affected by potential dust generation. Receptors are also summarised in tables 1 and 1.1.

Figure 2 shows the wind rose data for Barnsley with the wind direction in the locality as predominantly a south westerly wind (Metroblue, 0000). The wind rose is located from the nearest weather station to the site, located in Barnsley, 3.3 miles from the site location. The prevailing wind direction being south westerly indicates the probability of exposure of dust to schools, commercial premises, the local wildlife site and Dearne Valley Wetlands is low as these receptors are located to the east and south of the site. The vehicle movements and activities on site do have the potential to generate dust as identified in the environmental risk assessment although the risk has been identified as low with mitigating measures. The greatest risk to the environment will come from the migration of dusts under dry and windy conditions.



Title: Site Location & Sensitive Receptors	Date: 16/07/2023	Page Size: A3	Drawing Number: EJLidster-Barnsley-DW02
Site Location: West Green Way, Cudworth, Barnsley, S72 8UX.	Version: FINAL	Scale: 1:25000	Grid reference: SE 37821 09605

Figure 1: Nearby Sensitive Receptors

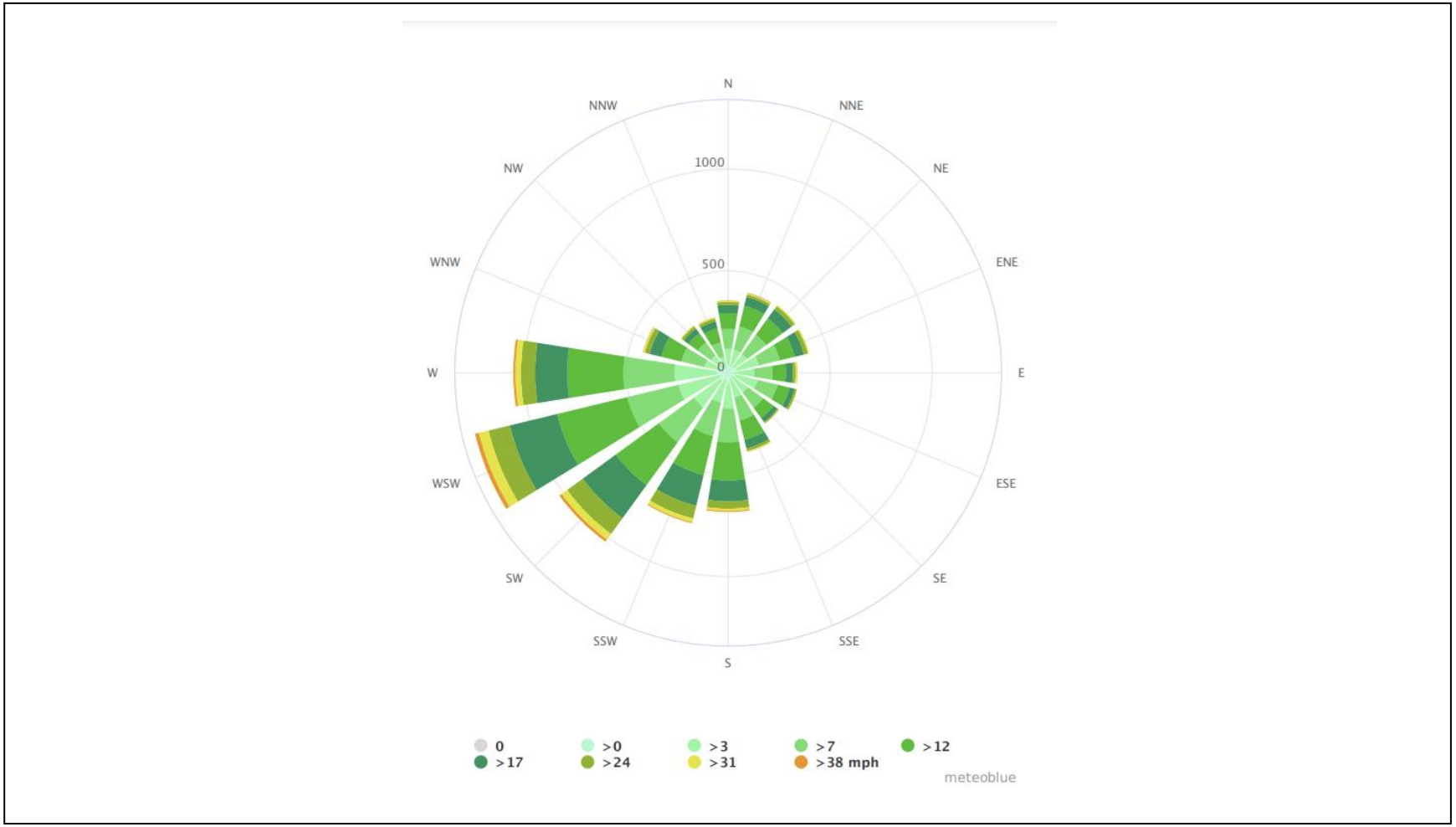


Figure 2: Wind rose showing the average wind direction and strength

Table 1 Distances to Selected, Representative Sensitive Locations

Boundary	Closest property	Approximate distance to West Green Recycling Yard site boundary (m)
East	Residential	300
Southwest	Residential	200
West	Residential	700
Northwest	Carlton Primary School	1200
East	Cudworth Churchfields Primary School	600
East	Cherry Dale Primary School	1300
East	Commercial area	560
Northwest	Industrial	875

Table 1.1 Sources of Dust and/or other Emissions

Company	Address	Type of Business	Distance from West Green Recycling Yard site boundary (m)
Ardagh Glass	Burton Road, Barnsley, S71 5RP	Glass Merchant	225
Premier Foods, Carlton Bakery	Fish Dam Lane, Carlton, Barnsley, S71 3HF	Food manufacturer	875

2. Operations at West Green Recycling Yard

2.1 Waste Deliveries to West Green Recycling Yard

The inert material is delivered to West Green Recycling Yard in vehicles which are either EURO5 or EURO6 compliant, depending on the age of vehicle. The existing use already established on site is not expected to change in terms of the number of vehicle movements, as the aggregate wash plant is not expected to result in an increase in traffic movements to and from the site.

The total amount of waste material accepted at the site per year which has been proposed in the permit variation application is 150,000 tonnes per year. The waste materials accepted onsite have not changed and are as stated in the permit. The waste is classified as per the Waste Classification Technical Guidance WM3 (Environment Agency, 2021).

Waste acceptance procedures will ensure the waste materials meet the relevant description. Waste Transfer Notes are required for each delivery or batch of deliveries from the same source, and copies are retained for record purposes. No more than the permitted amount of waste specified by the environmental permit will be exceeded. The 'Quality Protocol for Production of Recycled Aggregates' has been produced in accordance with the Waste and Resources Action Programme (WRAP) guidelines to ensure the recycled materials meet the appropriate requirements and outlines the waste acceptance procedures. Table 2.1 lists the waste types for the proposed operation.

2.2 Overview of Waste Processing, Dust, and Other Emission Controls

Figure 2 shows the onsite activities.
The site has a site office and reception , eight metal shipping containers (seven used for storage, with one used as the site office), a weighbridge, electricity substation and a wash plant.

The majority of the site is laid to concrete. Waste is stored and treated on an impermeable surface. The northwestern area of the site and the access track comprises of compacted ground, sitting atop a hardcore base. Concrete surface is easier to clean and helps to prevent dust and particulate dust generation.

Waste acceptance procedures are followed as outlined in the site's Recycled Aggregate Quality Protocol. Material is only accepted on site with a completed waste transfer note and visually inspected for contamination and the waste conforms with the waste transfer note description and EWC coding. Customers and vehicle drivers are advised that dusty/powder wastes are not accepted at the site. Incoming open top containers of waste are appropriately covered or sheeted when in transit. Dampening down of waste streams such as rubble and soils may take place prior to deposit to reduce dust generation.

Once the load is accepted it is directed to the site weighbridge before being deposited in the storage bays or directed to the reprocessing area to be crushed or screened. The material is then processed in the wash plant. Concrete block walls surround the majority of the site and are 3 metres high. The waste storage bays also have a height of 3 metres. This will help to further reduce the impact of dust migration from the site. North and eastern parts of the site have palisade fencing with a height of 2.3 meters.

Table 2.1 Typical waste types brought to West Green Recycling Yard

European Waste Code(EWC)	Product Description	Tonnes/week	Screening Area	Tipping Area	Incoming Waste Storage Area	Aggregate Storage Bays
17 01 01	Concrete		Yes	Yes	Yes	Yes
17 01 02	Bricks		Yes	Yes	Yes	Yes
17 01 03	Tiles and Ceramics		Yes	Yes	Yes	Yes
17 01 07	Mixtures of concrete, bricks, tiles, and ceramics other than those mentioned in 17 01 06		Yes	Yes	Yes	Yes
17 02 02	Glass		Yes	Yes	Yes	Yes
17 03 02	Bituminous mixtures, coal tar and tarred products		Yes	Yes	Yes	Yes
17 05 04	Soil and stones other than those mentioned in 17 05 03		Yes	Yes	Yes	Yes
17 05 08	Track ballast other those mentioned in 17 05 07		Yes	Yes	Yes	Yes
20 02 02	Soil and Stones		Yes	Yes	Yes	Yes
Total		3000 (max)				

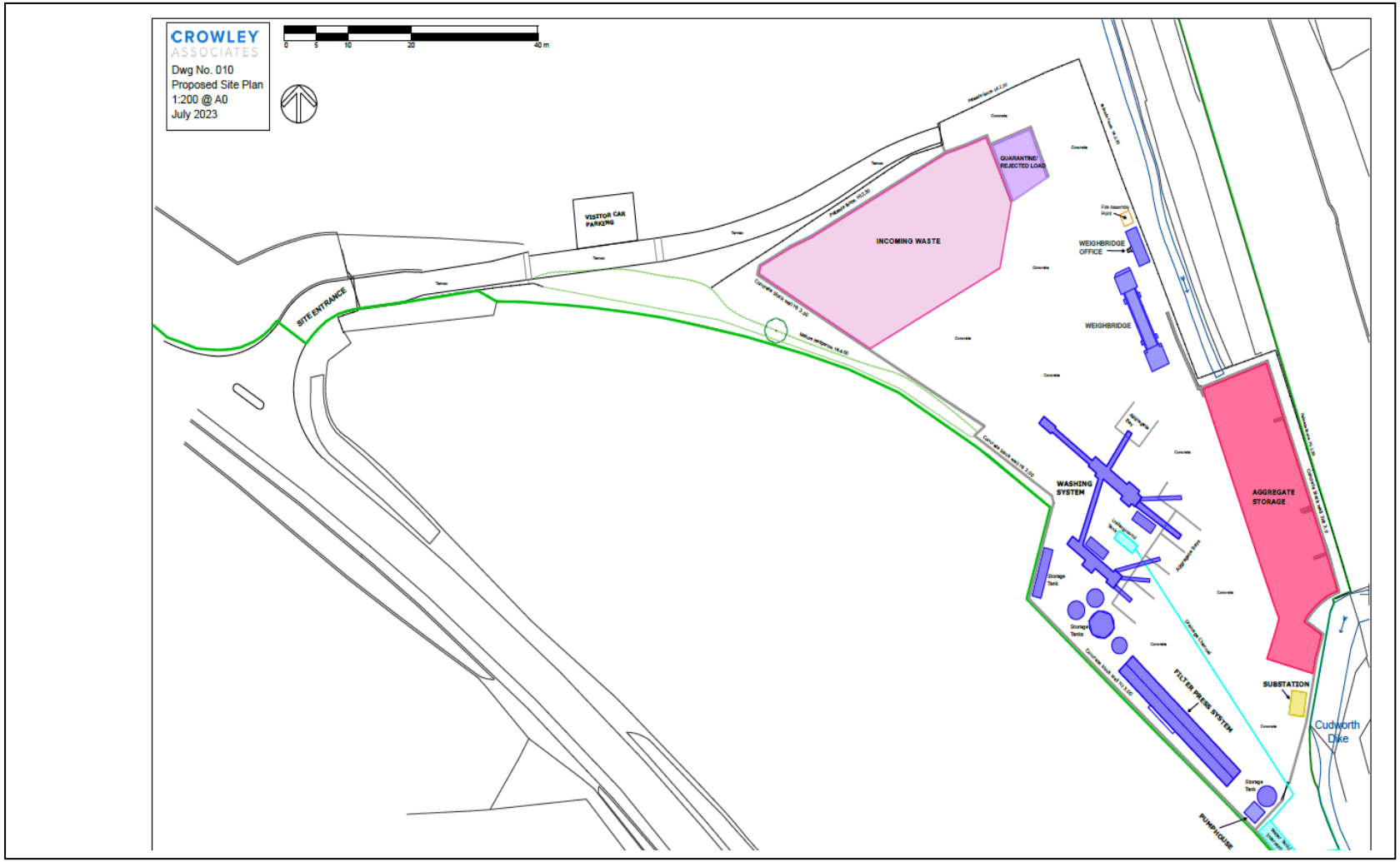


Figure 2: Site Layout Plan

Figure 3, taken from the environmental risk assessment identifies the receptor, source, pathway and the magnitude and management of dust risk.

Data and information				Judgement				Action (by permitting)	
Receptor	Source	Harm	Pathway	Probability of exposure	Consequence	Magnitude of risk	Justification for magnitude	Risk management	Residual risk
What is at risk? What do I wish to protect?	What is the agent or process with potential to cause harm?	What are the harmful consequences if things go wrong?	How might the receptor come into contact with the source?	How likely is this contact?	How severe will the consequences be if this occurs?	What is the overall magnitude of the risk?	On what did I base my judgement?	How can I best manage the risk to reduce the magnitude?	What is the magnitude of the risk after management? (This residual risk will be controlled by Compliance Assessment)
Local human population	Releases of particulate matter (dusts) and micro-organisms (bioaerosols).	Harm to human health - respiratory irritation and illness.	Air transport then inhalation.	High	Medium	High	Permitted waste types are inert and do not include dusts, powders or loose fibres and have a low potential to produce bioaerosols, but the treatment activities will produce particulate matter so a high magnitude risk is estimated. There is potential for exposure if anyone is living or working close to the site (apart from the operator and employees). There is potential for increased dust generation from permitted activities during prolonged dry periods e.g. summer months and windy	Prevailing wind direction is south west predominantly throughout the year. Reduces probability of exposure to schools and industrial areas. Delay tipping of inert material when very windy and follow dust emissions management plan. The site is not located within an AQMA designated for PM10.	Low
Protected sites - European sites and SSSIs Dearne Valley Wetlands- 1000m N, Carlton Marsh- 200m NW	Any	Harm to protected site through toxic contamination, nutrient enrichment, smothering, disturbance, predation etc.	Any	Medium	Medium	Medium	Waste operations may cause harm to and deterioration of nature conservation sites.	Waste accepted is non-hazardous and as such poses no significant risk to habitats. In addition, operations will be carried out taking the sensitive nature of the SSSI and Local Wildlife Site into account.	Low

Figure 3: Source-Pathway-Receptor Routes

3. Dust and Particulate (PM_{10}) Management

3.1 Responsibility for Implementation of the DEMP

The site's technically competent operator will ensure dust management measures are undertaken as appropriate to the site operations and current weather conditions. The technically competent operator must have a relevant WAMITAB certificate of competence plus an appropriate continuing competence (within date) which is renewed every 2 years.
The technically competent operator will be responsible for keeping records of monitoring and mitigation measures. All records will be retained for inspection as required. If further management measures are taken to control dust or weather condition monitoring, the additional mitigation measures will be recorded. In certain adverse weather conditions visual monitoring will be more intensive. Site staff are trained and the DEMP is located in the site office for staff to view when required. Additionally, vehicle drivers are made aware of the provision of the dust management plan and required to comply with the relevant provisions as appropriate.

3.2 Sources and Control of Fugitive Dust/Particulate Emissions

The most likely activities to cause dust generation are:

- Vehicles entering and leaving the site with mud on wheels, and tracking dust on to or off the site
- Debris falling off lorries if arrive uncovered
- Vehicles depositing the load into the waste storage bays
- Waste stored onsite
- Vehicles and mobile machinery sorting the waste including excavators, trommel screeners and wash plant
- Particulate emissions from the exhaust of vehicles and machinery on site
- Loading treated waste back onto vehicles.

To minimise dust generation, the dust control system will include the following measures:

- No acceptance of highly-dusty loads to the site
- Incoming open top containers of waste is appropriately covered or sheeted while in transit
- Internal roadways are damped down using a water bowser during adverse weather conditions to prevent dust arising from vehicle movements on site
- Site has a weekly visit with a road sweeper and can be on standby when required
- All surfaces within the site and storage areas are kept as tidy as possible to prevent accumulations of dust
- Dampening down of waste streams such as rubble and soils will take place prior to deposit to reduce dust generation.
- Dust suppression sprays are present on machinery when this is required whilst processing materials.
- Monitoring of any adverse weather conditions such as high winds. Operations are adjusted if required.

Table 3.1 shows the connection between pathway, receptor and source. This will encourage the operator to use this DEMP to ensure that there are no gaps in abating the sources of dust emissions on site. This is not an exhaustive list of all abatement options, and there may be other technology and abatement options that exist to achieve the same or a greater outcome in reducing the risk of pollution.

Table 3.1: Source-Pathway-Receptor Routes

Source	Pathway	Receptor	Type of impact	Where relationship can be interrupted
Mud	Tracking dust on wheels and vehicles, then mud dropping off wheels/vehicles when dry	In table 1 above	Visual soiling, also consequent resuspension as airborne particulates	Remove mud before vehicles leave site with wheel washing.
Debris	Falling off lorries	In table 1 above	Visual soiling, also consequent resuspension as airborne particulates	Ensure all vehicles entering and leaving the site are covered.
Tipping, storage and sorting of wastes in the open	Atmospheric dispersion	In table 1 above	Visual soiling and airborne particulates	Ensure low drop heights. Tipping will not be undertaken during extremely windy weather conditions.
Vehicle exhaust emissions	Atmospheric dispersion	In table 1 above	Airborne particulates	Regulatory controls and best-practice measures to minimise source strength
Non road going machinery exhaust emissions	Atmospheric dispersion	In table 1 above	Airborne particulates	Regulatory controls and best-practice measures to minimise source strength

Table 3.2 show the measures that will be used on site to control dust/particulates (PM_{10}) and other emissions.

Abatement Measure	Description / Effect	Overall consideration and implementation	Trigger for implementation
Preventative Measures			
Site / process layout in relation to receptors	Locating particulate emitting activities at a greater distance and downwind from receptors may reduce receptor exposure, provided that emissions from the source are not dispersed over significant distances.	The prevailing wind is predominantly south west and therefore the sensitive receptors (Schools, Commercial) are not located in this area.	Visual monitoring and weather monitoring will ensure dust generation is reduced as far as possible. Site operations can be adjusted if necessary, for example in high winds.
Site speed limit, 'no idling' policy and minimisation of vehicle movements on site	Reducing vehicle movements and idling should reduce emissions from vehicles. Procurement policy to only purchase clean burn road vehicles and non-road going mobile machinery. Enforcement of a speed limit may reduce re-suspension of particulates by vehicle wheels.	Easy to implement as part of good practice. Should be identified clearly in the site management system and implemented as appropriate measures.	Vehicle movements and idling will be reduced as far as possible.
Minimising drop heights for waste. Use of enclosed chutes for waste drops/end of conveyor transfers and covered skips / storage vessels.	Minimising the height at which waste is handled should reduce the distance over which debris, dust and particulates could be blown and dispersed by winds. Enclosing processes will further reduce dispersion.	Relatively easy to implement at many sites. These steps should be identified clearly in the site management system and implemented as appropriate measures.	Drop heights are always kept to a minimum.
Good house-keeping	Having a consistent, regular housekeeping regime that is supported by management, will ensure site is regularly checked and issues remedied to prevent and	Easy to implement and requires minimal equipment. Encourages a sense of pride and satisfaction amongst the staff which promotes vigilance and a positive culture.	This is carried out at all times during operational hours.

Abatement Measure	Description / Effect	Overall consideration and implementation	Trigger for implementation
	remove dust and particulate build up.	Staff should target the areas not caught by the road sweeper and other cleaning apparatus.	
Sheeting of vehicles	Prevents the escape of debris, dust and particulates from vehicles as they travel.	Relatively easy to implement at many sites. Should be identified clearly in the site management system and implemented as appropriate measures.	Incoming open top containers of waste are appropriately covered or sheeted whilst in transit.
Hosing of vehicles on exit	May remove some dirt, dust and particulates from the lower parts of vehicles although likely to be less effective than a more powerful wheel wash.	May be worthwhile where wheel wash installation is not feasible, or where the wheel wash does not achieve the desired outcome. This should be in the site procedures and training. If the action works as a control measure, then consideration must be given to installing a wheel wash as the appropriate measure.	Dust suppression sprays are present on the machinery and used as required.
Ceasing operation during high winds and/or prevailing wind direction	Mobilisation of dust and particulates is likely to be greater during periods of strong winds and hence ceasing operation at these times may reduce peak pollution events.	Likely to reduce dust and particulate emissions, however, not a long-term solution. Procedures should be in place to identify when operations will cease. May require a weather station to be installed.	Operations will cease on site during high winds.
Easy to clean concrete impermeable surfaces	Creating an easy to clean impermeable surface, using materials such as concrete as opposed to unmade (rocky or muddy) ground within the site and on site haul roads. This should reduce the amount of dust and particulate generated at ground level	Considered good overall based on dust and particulate reduction but potentially costly and disruptive to retrofit. For sites that have concrete surfaces ensure there are maintenance and cleaning procedures in the management system and they are implemented.	The majority of the site is laid to concrete which is maintained and cleaned on a regular basis.

Abatement Measure	Description / Effect	Overall consideration and implementation	Trigger for implementation
	by vehicles and site activities.		

Preventative Measures			
On-site sweeping	Sweeping could be effective in managing larger debris, dust and particulates but may also cause the mobilisation of smaller particles. Road sweeping vehicles damp down dust and particulates whilst brushing and collecting dust and particulates from the road surface, particularly at the kerbside. This may generate dust and particulate movement that may become a Health and Safety issue if the filters and spray bars on the sweepers are not maintained.	Easy to apply but less effective than other measures. Should be covered in the management system and procedures and implemented thoroughly.	A road sweeper visits the site weekly and is also on standby to come to site if required to clear the site surface of mud, dust and litter. As part of general housekeeping, site will be manually swept when necessary.

Abatement Measure	Description / Effect	Overall consideration and implementation	Trigger for implementation
Water suppression with bowser	Using bowsers is a quick method of damping down large areas of the site with large water jets. This method could also be used on easy-to-clean, impermeable concrete surfaces.	Highly water intensive and more likely to minimise dust and particulates on the ground that is at risk of being re-suspended rather than already airborne dust and particulates. Very effective at dampening down haul roads and large surface areas. Can also come with hose attachments and other attachments to increase its versatility. Can reduce the calorific value of the material which should be considered if sent for energy recovery/biomass type operations. Maintenance should be covered in the management system and procedures.	Dust suppression sprays are present on machinery and used as required to reduce dust generation.

3.3 Other considerations

In the event of severe weather conditions i.e., dry weather with high winds, the technically competent operator will decide whether to cease activities with the main emphasis of reducing any dust impacts. In the event of any unforeseen circumstances i.e., faulty equipment, lack of water supply, the technically competent operator will assess whether to cease activities with the main emphasis on site will be to reduce any dust impacts. Wheel washing will be available to minimise dust generation in all climatic conditions and used more frequently during dry weather conditions.

A permanent water supply is available on site in all climatic conditions. The wash plant water storage tank and the borehole located on site (ensuring less than 20 cubic metres of water per day is abstracted).

3.4 Visual Dust Monitoring

The technically competent operator will ensure that site operations are the subject of visual monitoring for emissions of particulate matter.
Visual monitoring by suitably trained site personnel is the most effective method of detecting as quickly as possible emissions of particulate matter throughout the working day thereby facilitating the prompt assessment of such emissions and the selection and implementation of control measures as necessary. The effectiveness of the measures for controlling emissions shall be assessed during inspections undertaken at the site following implementation of the control measures. Any problem that is observed will be reported to the operator who will be

responsible for investigating the cause and implementing any remedial action as necessary. The results of inspections and remedial measures taken will be recorded.

No monitoring will take place outside operational hours but the technically competent manager will be available to attend site should a complaint be received. If complaints are received, additional dust monitoring will be implemented.

In the event of dust being detected beyond the site boundaries, the operation will cease.

3.5 Particulate Matter Monitoring

The management and monitoring of particulate matter will be undertaken by visual assessment. An action plan will be implemented on the basis that:
i) there is an unacceptable visual emission of particulate matter from the site or
ii) a complaint is received in relation to emissions to air.

An unacceptable visual emission of particulate matter from the site comprises a visual observation of dust or particulate matter crossing the site boundary. The initial observation will be made by the site personnel who has identified the emission and will be verified by the technically competent manager. If an unacceptable visual emission is observed by on-site personnel, the action plan will be implemented immediately.

It is deemed that PM10 monitoring equipment is not required at this time. Should this situation change in the future then this plan would be updated and a copy sent to the Environment Agency for their consideration and incorporation into the site's permit.

4. Actions in the event of dust leaving site

1. The technically competent operator assesses the site activities and the nature of the waste handling and deliveries immediately prior to the alarm being raised, to work out what has caused the problem.
2. If the source cannot be ascertained with 100% confidence, the operator will suspend the likely dust/particulate generating activities.
3. If the source is within the site's control, the operator will take appropriate action in terms of dust/particulate abatement, to ensure that the situation is not repeated. This may take the form of the following;
a) Investigating the source of the dust/particulates to prevent a re-occurrence.
b) Using onsite stored rainwater to damp down road surfaces on site as appropriate
c) Suspending operations which are not being conducted using best-practice controls as set out in Table 3.1.
d) Log findings
e) Inform the Environment Agency of the breach and detail mitigating measures undertaken.
f) Liaise with local residents and appropriate stakeholders to ensure that they are fully aware of the situation and the steps being taken to rectify the situation.

5. Reporting and Complaints Response

In the event of any complaint, an investigation will be undertaken into the circumstances. Where the complaint resulted from activities within the site, steps will be taken where possible to reduce the impact of, or remove, the dust source. Any investigation will be concluded within two working days. The operator will maintain a daily record of complaints and investigations with any mitigation measures taken.

5.1 Reporting of Complaints

Complaints will be recorded on the dust complaint form detailed in Appendix A. Copies of all forms will be retained for inspection by interested parties upon request.

5.2 Management Responsibilities

The technically competent manager will be responsible for responding to and dealing with complaints.

6. Summary

The operations at the site may, at times, produce dust but the dust produced will be limited by the nature of the operations and the mitigating measures. In any event dust will be controlled to confine and prevent its escape and to minimise airborne dispersal.
The main cause of dust generation will come from vehicle movements on and off site and the tipping and spreading of subsoil and topsoil.

Effective site management, to ensure the control of airborne dust, will include:

- No acceptance of highly dusty loads to the site
- Incoming open top containers of waste is appropriately covered or sheeted while in transit
- Internal roadways are damped down using a water bowser during adverse weather conditions to prevent dust arising from vehicle movements on site
- Site has a weekly visit with a road sweeper and can be on standby when required
- All surfaces within the site and storage areas are kept as tidy as possible to prevent accumulations of dust
- Dampening down of waste streams such as rubble and soils will take place prior to deposit to reduce dust generation.
- Dust suppression sprays are present on machinery when this is required whilst processing materials.
- Monitoring of any adverse weather conditions such as high winds. Operations are adjusted if required.

Ongoing monitoring of dust generation and with the appropriate updating of the DEMP, will ensure continuing effective dust management at West Green Recycling Yard without any adverse dust impacts off site

Appendices

Appendix A - Dust Complaint Form

Customer Details	
Customer Name -	
Address – Postcode -	
Customer Contact Details -	
Tel -	
Email -	
Date -	
Complaint Ref Number -	
Complaint Details -	

Investigation Details	
Investigation carried out by -	
Position -	
Date & time investigation carried out -	
Weather conditions -	
Wind direction and speed -	
Investigation findings -	
Feedback given to Environment Agency and/or local authority -	
Date feedback given -	
Feedback given to public -	
Date feedback given -	

Review and Improve	
Improvements needed to prevent a reoccurrence -	
Proposed date for completion of the improvements -	
Actual date for completion -	
If different insert reason for delay -	
Does the dust management plan need to be updated -	
Date that the dust management plan was updated -	

Closure	
Site manager review date	
Site manager signature to confirm no further action required	

7. References

Environment Agency (2022) *Control and monitpr emissions for your environmental permit*. Available at: https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit#dust-mud-and-litter (Accessed 05/07/2023)

Environment Agency (2021) *Guidance on the classification and assessment of waste (1st Edition v1.2.GB) Technical Guidance WM3.* Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1021051/Waste_classification_technical_guidance_WM3.pdf (Accessed 05/07/2023)

Metroblue (0000) *Simulated historical climate & weather data for Barnsley.* Available at: https://www.meteoblue.com/en/weather/historyclimate/climatemodelled/barnsley_united-kingdom_2656284 (Accessed 04/07/2023)

Environment Agency (2023) *Excavated waste from utilities installation and repair: RPS 211.* Available at: https://www.gov.uk/government/publications/excavated-waste-from-utilities-installation-and-repair-rps-211/excavated-waste-from-utilities-installation-and-repair-rps-211. (Accessed 18/07/2023)