Section 8

OPERATING TECHNIQUES

Remondis Ltd

West Line Industrial Estate

Birtley

Chester Le Street

County Durham

DH2 1AU

Olive Compliance Ltd
Planet House, Northumbrian Way, Newcastle-upon-Tyne, NE12 6EH

CONTENTS

1.0 INTRODUCTION 1

1.1 Report Structure 1

2.0 MANAGEMENT 2

2.1 Management System 2

2.1.1 Management Structure and Responsibilities 2

2.1.2 Technical Competence and Training 2

2.1.3 Site Security 3

2.1.4 Permit Surrender 3

2.1.5 Display of Environmental Permit 4

2.1.6 Managing Documentation and Records 4

2.1.7 Reporting Non-Compliance and Taking Corrective Action 4

2.1.8 Auditing and Legal Compliance 4

2.1.9 Monitoring, Measuring and Reviewing Environmental Performance 5

2.1.10 Operational Control, Preventative Maintenance and Calibration 5

2.1.11 Design and Construction Quality Assurance 5

2.2 Accident Management Plan 5

2.2.1 Hazard Identification 5

2.2.2 Unauthorised Waste 6

2.2.3 Fire Prevention Plan 6

2.2.4 Loss of Containment 6

2.2.5 Security and Vandalism 7

2.2.6 Flooding 7

3.0 OPERATIONS 9

3.1 Process Description 9

3.2 Permitted Activities 9

3.2.1 Permitted Types and Quantities of Waste 9

3.3 Waste Acceptance 9

3.3.1 Hours of Operation 9
3.3.2 Load Inspection and Waste Control 9
3.3.3 Means of Measurement 10
3.4 Waste Storage 10
3.5 Waste Treatment 10
3.6 Site Infrastructure and Equipment 13
3.6.1 Site Identification Board 13
3.6.2 Plant and Equipment 13
4.0 EMISSIONS AND MONITORING 13
4.1 Surface Water and Groundwater 13
4.1.1 Engineered Containment 13
4.1.2 Containment Bunding 14
4.2 Odour 14
4.3 Dust 14
4.4 Noise 15
4.5 Pests 15
4.6 Litter 16
4.7 Mud and Debris 17
5.0 INFORMATION 17
5.1 Reporting and Notifications 17
5.1.1 Changes in Technically Competent Persons 17
5.1.2 Waste Types and Quantities 18
5.1.3 Relevant Convictions 18
5.1.4 Notification of Change of Operator's or Holder's Details 18
5.1.5 Adverse Effects 18
5.1.6 Closure 18
6.0 CLOSURE 18

REFERENCED DOCUMENTS

ENVIRONMENTAL MANAGEMENT PLAN

WORKING PLAN

FIRE PREVENTION PLAN

ODOUR MANAGEMENT PLAN

APPENDICIES

WASHPLANT MANAGEMENT SYSTEM

DUST AND EMMSISON MANAGEMENT PLAN

1.0 Introduction

Remondis Limited (REM) has instructed Olive Compliance Limited (OCL) to prepare an application for a Bespoke Environmental Permit Variation Application for their site at West Line Industrial Estate, Birtley, Chester Le Street, County Durham, DH2 1AU.

The variation application seeks to make the below change only to the site's operations:

The variation application seeks to make the below change only to the site's operations:

- To include the waste activity of washing of wastes through the installation of a wash plant

Waste operations at the site are currently authorised by a Tier 3 environmental permit (A11 : Household, Commercial & Industrial Waste T Station).

This document provides a summary of the key operational techniques and control measures that will be implemented at the site as a result of the proposed changes.

1.1 Report Structure

This report describes the operating techniques that are to be implemented at the facility to ensure compliance with the conditions of the Environmental Permit. The report has been drafted to satisfy the requirements of Environmental Agency (EA) Guidance[1] and is divided into the following Sections.

Section 1 Introduction

Section 2 Management

Section 3 Operations

Section 4 Emissions and Monitoring

Section 5 Information

Section 6 Closure

[1]www.gov.uk/guidance/risk-assessments-for-your-environmental-permit

2.0 Management

2.1 Management System

REM operate their own in-house management system which ensures that;

- the risks that the activities pose to the environment are identified;
- the measures that are required to minimise the risks are identified;
- the activities are managed in accordance with the management system;
- performance against the management system is audited at regular intervals; and
- the Environmental Permit is complied with.

The management system is supplemented by this document which outlines the operating techniques at the site and demonstrates conformance with the requirements of relevant Environment Agency guidance.

The company have achieved a number of ISO certifications for quality management (ISO9001-ISO14001-ISO18001. These certifications reinforce company credibility and their responsibility as a business. The company is committed to continuous improvement to ensure they have best practice processes in place. Surveillance audits and certifications further demonstrate the effectiveness of company management systems.

2.1.1 Management Structure and Responsibilities

The Operations Manager/Site Manager is responsible for day-to-day operations and compliance with the Environmental Permit.

Whenever the site is open to receive or dispatch wastes, or will carry out any of the waste management operations, it will be supervised by at least one member of staff who is suitably trained and fully conversant with the requirements of the permit regarding:

- waste acceptance and control procedures;
- operational controls;
- maintenance;
- record-keeping;
- emergency action plans; and
- notifications to the Environment Agency.

2.1.2 Technical Competence and Training

The site will be managed by sufficient staff, competent to operate the site. The management system will deliver the following:

- all staff will have clearly defined roles and responsibilities;
- records will be maintained of the skills required for each post;
- records will be maintained of the training and relevant qualifications undertaken by staff to meet the requirement of each post; and
- operations will be governed by standard operating instructions.

Operations at the site will be under the overall control of a technically competent person who holds the relevant Certificate of Technical Competence (COTC) under the Waste Management Industry Training and Advisory Board (WAMITAB) scheme.

Certificates are included within the application for the Technically Competent Manager.

An assessment of staff training needs will be carried out to identify the posts for which specific environmental awareness training is needed, and to determine the scope and level of such training.

The assessment of training needs will be reviewed on an annual basis.

Details of staff training procedures and recording are included in the company's Quality Environmental Management System.

The training programme will ensure that relevant staff are aware of the following:

- regulatory implications of the permit for the site and their specific work activity;
- all potential environmental effects from operations under normal and abnormal circumstances;
- the need to report deviations from the permit; and
- prevention of accidental emissions and the action to be taken should accidental emissions occur.

2.1.3 Site Security

Details of site security are included in Section 1.3 of the Working Plan.

In order to prevent unauthorised access, a number of site security measures will be in place at the site including;

- A 2.4-metre-high palisade fence with lockable gates protects the facility;
- Daily visual inspections of the site infrastructure, carried out by the Site Management Team will identify any unsatisfactory fence conditions, e.g. evidence of trespass.
- If appropriate, a temporary repair will be made immediately, and permanent repairs will be programmed in for completion within a 15 working day period;
- To ensure the security of the site and prevent access during non-operational times by vehicles and pedestrians the gates will be locked at times when the site is not active;
- The site will be inspected at the commencement of each working day. Any defects or damage which compromises the integrity of the enclosure will be made secure by temporary repair as soon as is practicable. Permanent repairs will be affected as soon as practicable;
- All inspections, any defects, damage, or repairs will be recorded in the site diary; and
- The site has a CCTV system which was installed and is monitored by a UKAS-Accredited Security Monitoring Organisation.

A copy of the Site Inspection Document is included in Appendix B of this document.

2.1.4 Permit Surrender

To assist in permit surrender, records will be maintained to demonstrate how the land beneath the site has been protected at all times between the date of permit issue and the end of permit operations.

Records to be maintained will include:

- maintenance of site surfacing;
- incidents and accidents;
- maintenance of drains and sumps; and
- actions taken to clean up incidents and spillages.

2.1.5 Display of Environmental Permit

A copy of the Environmental Permit will be kept available for reference by all staff and contractors whose work may have an impact on the environment. All staff will be informed where the Environmental Permit is kept.

2.1.6 Managing Documentation and Records

Controls will be in place to ensure that all documents are issued, revised and maintained in a consistent fashion.

The documents that will be included within the scope of the controls are as follows:

- policies;
- responsibilities;
- maintenance records;
- procedures;
- monitoring records;
- results of audits;
- results of reviews;
- complaints and incident records; and
- training records.

Records will be made and kept up to date on a daily basis to reflect deliveries, on site treatment and dispatches. All records relating to waste acceptance will be maintained and kept readily available on site and kept for a minimum of 2 years after the waste has been removed off site.

2.1.7 Reporting Non-Compliance and Taking Corrective Action

Procedures as detailed in Sections 2.2.3/4.1 of the Working Plan and the company Accident Management Plan will ensure appropriate corrective action is taken in response to problems identified at the site. The procedure will ensure that non-conformances are reported, investigated and rectified, and that failures and weaknesses are prevented. The following aspects will be considered:

- actual or potential non-compliance;
- system failure discovered at internal audit;
- suppliers or subcontractors breaking the agreed operating rules;
- incidents, accidents, and emergencies;
- malfunction, breakdown or failure of plant;
- other operational system failure; and
- complaints.

The action taken in response to the non-conformance may include:

- obtaining additional information on the nature and extent of the non-conformance;
- discussing and testing alternative solutions;
- modifying procedures and responsibilities;
- seeking approval for additional resources and training; and
- contacting suppliers and contractors (as applicable).

2.1.8 Auditing and Legal Compliance

There will be a formalised internal inspection and auditing procedure to ensure the facility is audited at defined intervals and that the progress of corrective and preventative action is monitored.

2.1.9 Monitoring, Measuring and Reviewing Environmental Performance

A formalised management structure will review environmental performance, and ensure any necessary actions are taken.

2.1.10 Operational Control, Preventative Maintenance and Calibration

The management system will complement operational procedures so as to ensure effective control of site operations, the use of approved suppliers and contract services, the maintenance of operational equipment and the calibration of monitoring equipment.

The Site maintains a planned preventative maintenance (PPM) scheme where items of non-compliance are recorded, and appropriate timescales and owners are identified according to priority.

All plant and equipment will be subject to a programme of planned preventative maintenance which will follow the inspection and maintenance schedule recommended by the manufacturer.

The relevant procedures are contained in Sub-sections 1.4.7 and 2.2.8.

2.1.11 Design and Construction Quality Assurance

All relevant elements of the site (not already constructed) will be designed in accordance with recognised standards, methodologies and practices.

The design process will use a risk-based approach and will be appropriately documented using drawings, specifications and method statements where appropriate to provide an adequate audit trail.

A competent and suitably qualified person will supervise the construction activities.

2.2 Accident Management Plan

The company recognises the importance of the prevention of accidents that may have environmental consequences and that it is crucial to limit those consequences.

An accident management plan will be implemented and maintained at the site to ensure the site and site staff are fully prepared for any such incidents. The accident management plan will be reviewed at least every four years or as soon as practicable after an incident, with changes made accordingly to minimise the risk of occurrence.

The following accident management plan describes the techniques that will be implemented to minimise the risks posed to the environment. Activities affecting the health and safety (H&S) of operatives, contractors and visitors will be separately managed in compliance with H&S regulation and company H&S Policy.

A copy of the most current accident management plan is included within the EMS.

2.2.1 Hazard Identification

The following accident hazards have been identified from the Environment Agency's Generic Risk Assessments;

- Unauthorised Waste Acceptance;
- Flooding;
- Arson and/or Vandalism;
- Accidental Fire; and

- Spillage of Liquids.

The company will employ a number of measures to prevent the realisation of these hazards to the environment and human health.

2.2.2 Unauthorised Waste

Acceptance of unauthorised materials has the potential to cause harm to the environment and human health for example the receipt of dusty wastes could impact the amenity of the site's neighbours. All wastes received at the site will be subject to inspection and checking against the declaration on the waste transfer note. In the event that unauthorised waste is delivered to the site, the waste will be segregated and stored in a designated quarantine area within the building prior to export from site to a suitably permitted facility for recovery or disposal.

The QMS waste acceptance procedures are included with the EMS and a full procedure is covered in Appendix A (EMS 002).

2.2.3 Fire Prevention Plan

The risk of accidental combustion of the waste types accepted at the site is low. Notwithstanding this, to prevent and minimise the potential impact of fire, the company have an EA approved Fire Prevention Plan EMS 004 (See FPP Section 7 of this application). A brief summary of the measures which will be employed is as follows:

- incompatible materials will not be accepted at the site;
- the plant inspection schedule will include checks of electrical equipment within the site to ensure that any faults are identified and repaired;
- fire extinguishers will be provided at designated locations;
- smoking will not be permitted in the operational areas of the site;
- working practices will ensure the assessment of fire hazards and training of employees in fire prevention, e.g. the use of fire extinguishers and emergency procedures; and
- no wastes will be burned on the site and any fire at the site will be treated as an emergency.

In the event of a major fire, the following action will be taken:

- the Operations Manager/Site Manager and Fire Brigade will be notified immediately and the Environment Agency as soon as practicable;
- the burning area will be isolated, and attempts will be made to extinguish the fire utilising the onsite fire extinguishers if safe to do so; and
- the site and buildings will be evacuated.

2.2.4 Loss of Containment

Loss of containment could lead to spillage and leakage of potentially contaminating liquids. To prevent loss of containment and minimise the risk and impact of releases the following measures will be implemented:

- *Containment system:* any facilities for the storage of oils, fuels or chemicals will be sited above ground on impervious bases and surrounded by impervious bund walls. The volume of the bunded compound will be at least the equivalent to the capacity of the tank plus 10%. All filling points, vents and gauges will be located within the bund.
- *Storage tanks:* storage tanks will be constructed to the appropriate British Standard;
- *Inspection:* tanks will be inspected visually on a daily basis by the site staff to ensure the continued integrity of the tanks, and identify the requirement for any remedial action;

- *Spill kits*: materials suitable for absorbing and containing minor spillages will be maintained on site; and
- *Monitoring techniques:* the site staff will undertake daily monitoring for evidence of spillage and leakage.

In the event of any potentially polluting leak or spillage occurring on site, the following action will be taken:

- Minor spillages will be cleaned up immediately, using sand or proprietary absorbent. The resultant materials will be placed into containers and will then be removed from site and disposed of at a suitably permitted facility. The incident will be logged in the site diary.
- Any dry wastes spilled on site will be collected and transported to the appropriate area of the site.
- In the event of a major spillage, which is causing or is likely to cause polluting emissions to the environment, immediate action will be taken to contain the spillage and prevent liquid from entering surface water or drains. The spillage will be cleared immediately and placed in containers for offsite disposal, and the Environment Agency will be informed.

The spillage procedure, included in Section 3.2.1 of the EMS, details further information in regard to spillages on site and the company Accident Management Plan EMS003.

2.2.5 Security and Vandalism

As detailed in Section 2.5 Security Management the following security measures are in place;

- *Site perimeter*: the site benefits from fencing around the perimeter;
- *Security gates*: will be locked at all times when the facility is unattended, and the site gate will be locked when the site is not in use at the entrance of the site;
- *Inspection*: gates and fencing extending around the site will be inspected regularly by the operations staff to identify deterioration and damage, and the need for any repairs;
- *Maintenance and repair*: fencing and gates will be maintained and repaired to ensure their continued integrity. In the event that damage is sustained repairs will be made by the end of the working day. If this is not possible, suitable measures will be taken to prevent any unauthorised access to the site and permanent repairs will be affected as soon as practicable;
- *Authorised access system*: all visitors to the site will be required to register in the visitor's book and sign out again on exit to minimise the risk of unauthorised visitors being present on site; and
- *Monitoring techniques*: operational procedures, including regular inspections will ensure continual monitoring of security provision at the site;
- *CCTV*: is installed around all operational areas of the site.

In the event of a breach of security at the site, the cause will be investigated, and appropriate mitigation measures implemented. Records to be maintained include inspections and maintenance of security fencing and gates, breaches of security, investigations and actions taken.

2.2.6 Flooding

Checks conducted on the Environment Agency Flood Risk Map, identifies the site has having a very low risk of surface water flooding.

Surface water flooding, sometimes known as flash flooding:

- happens when heavy rain cannot drain away
- is difficult to predict as it depends on rainfall volume and location
- can happen up hills and away from rivers and other bodies of water

- is more widespread in areas with harder surfaces like concrete

Checks conducted on the Environment Agency Flood Risk Map, identifies the site has having a very low risk of flooding from Rivers and the Sea.

The site Accident Management Plan covers flood management (EMS003).

3.0 Operations

3.1 Process Description

The site's annual permitted tonnage is 149,999 tpa of Household, Commercial and Industrial wastes.

Wastes will be accepted in accordance with waste acceptance procedures set out below. Wastes accepted at the site for processing will undergo one or a number of the following treatments prior to transfer offsite.

Remondis operates a Non-Hazardous Waste Management facility which covers the import, storage and treatment of construction and demolition wastes as well as the transfer of local authority green waste.

The site primarily hires various sized skips to households, construction and demolition businesses with the aim to recycle their contents which generally include non-hazardous wastes, brick, rubble, metals, wood, plastics and cardboard.

3.2 Permitted Activities

The waste management carried out are described and limited to those within the site permit.

3.2.1 Permitted Types and Quantities of Waste

150,000 Tonnes Per Year will be the permitted tonnage.

The current permitted tonnage is 149,999tpa.

The list of permitted wastes are detailed within the current permit.

3.3 Waste Acceptance

3.3.1 Hours of Operation

The facility will be open to receive wastes and operate in line with the current planning permission.

3.3.2 Load Inspection and Waste Control

All vehicles bringing waste material to the site will report to the weighbridge where the load will be visually inspected, if possible, in order to confirm its description and composition against the relevant waste transfer note, and other accompanying documentation. All wastes will undergo a further visual inspection during deposition within the designated area.

Wastes will only be accepted at the site if the description in the accompanying documentation is in accordance with the permit and that onsite inspection confirms waste is consistent with the description provided.

Should the wastes be found not to conform during the initial visual inspection, then the details will be recorded, and the vehicle turned away. Should wastes already be discharged within the stockpile area and deemed not to conform or otherwise not be permitted then the waste will be picked out and:

- reloaded on to the delivery vehicle; or
- removed to a designated quarantine area as appropriate

Records of non-compliant waste received at the site will include details on:

- the quantity;
- characteristics;
- origin;
- delivery date and time; and
- the identity of the producer and carrier

Wastes will not be accepted unless the site is adequately resourced to receive the waste.

A record will be kept in the site diary of all rejected wastes. The waste producer and the Environment Agency will be notified of significant non- conformance.

Waste acceptance procedures are included in the company Working Plan and the company Quality Environmental Management System. A copy of EMS002 is included in Appendix A of this document.

3.3.3 Means of Measurement

The quantity of waste accepted and despatched from the facility will be measured via the onsite use of the weighbridge.

All wastes entering the site will be recorded upon arrival and the waste and recyclable components removed from site for disposal for further recovery or reuse will also be recorded on exit.

3.4 Waste Storage

Maximum waste storage on site at any one time will be managed in accordance with the sites approved Fire Prevention Plan.

All wastes are stored on a concrete impermeable system, with a comprehensive internal drainage system installed throughout the permitted area.

The maximum storage capacity at any one time is 320 tonnes.

3.5 Waste Treatment

Wastes accepted at the site for processing will undergo one or a number of the following treatments prior to transfer offsite for further recovery.

The activities are specified in Annex I and Annex II of the Waste Framework Directive 2008 as follows:

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

Limits on treatment activities are specified the permit as;

- Treatment consisting only of physical sorting or separation of wastes into different components for recycling or reclamation.

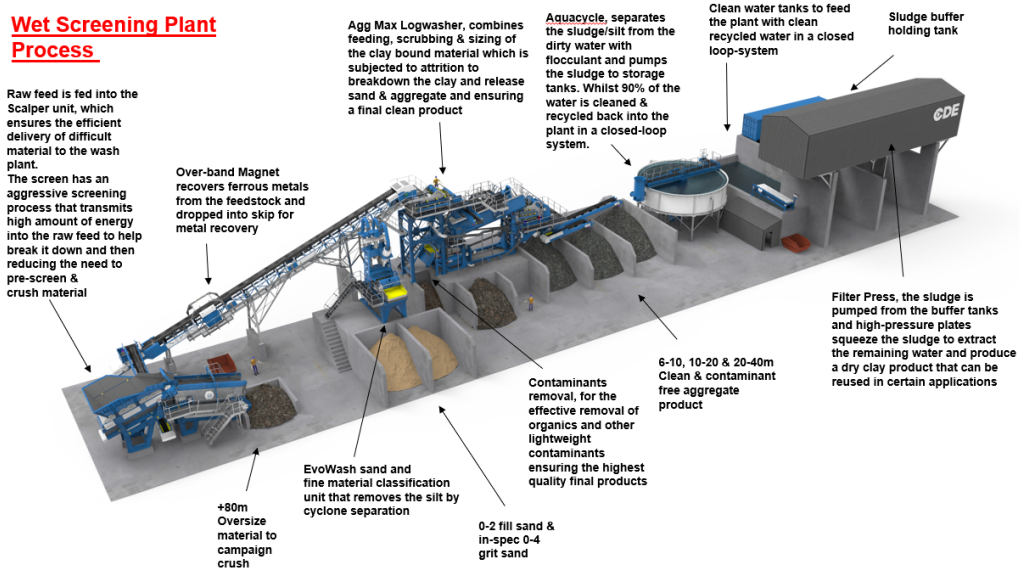
Remondis wish to install a wash plant is situated within the currently permitted boundary.

Detailed specifications and layouts for the proposed wash plant are included within the Operating Techniques document.

Wash water is contained within a closed loop system, with the principal wash elements to include:

- Cleanwater Tank,
- Aquacycle System,
- Aggmax Logwasher;
- Evowash System;
- Sludge Tank,
- Filter Press

Image 4 – Wash plant System



The wash plant will be monitored and operated by a trained plant operator and will process incoming feedstock wastes (C&D aggregates/soils) in accordance with the sites current allowed annual throughput.

The wash plant can process 50 tonnes of waste per hour, with infeed water supplied and topped up via the clean water tank.

The wash water will be re-circulated within a closed loop system, with filter cake dewatered prior to leaving the plant to retain as much water as possible.

Physical barriers will be put in place to minimise water loss through the wash process. It is anticipated that 95% of water will be retained by the plant. As such, it is estimated that the daily 'top-up volume' will be less than 15m^3 per day.

A flocculant will be used to aid with the removal of suspended particles and aid with wash water retention and fines extraction. The flocculant is Non-Hazardous and has low mobility in soil and all components used in its manufacture are included in the European Inventory of Existing Chemical Substances (EINECS) or are not required to be listed on EINECS.

Final aggregate gradings will depend on plant operations, however, at this stage, it is considered the following product and filter cake gradings can be achieved.

- 6-10 mm single size,
- 10-20 mm single size,
- 20 - 40mm single size,
- Fine sand 0- 2mm,
- Grit sand 0-4mm,
- Filter Cake (Clay for reuse)

Following washing and grading, aggregates will be stored in material storage bays which is underlain by an impermeable surface limiting the migration of residual wash water.

All plant and equipment must comply to PUWER regulations and operators must carry out prestart inspections on all plant and equipment.

A maintenance schedule is in place which includes servicing, calibration and preventive maintenance. All equipment on 3 phase power supply are subject to a 6 monthly EIRC by a competent contractor.

Return valves are installed where required, gate valves are also secured to prevent accidental release and all operators must be trained and competent.

Emergency procedures will be put in place which will include for the following:

- Maintain a stock of repair patches
- Spill kits to be kept on site and around wash plant area,
- Emergency spillage drills to be carried out
- Sludge tank and pipework emptied
- A maintenance schedule is in place which includes servicing, calibration and preventive maintenance
- 24hr Remote CCTV surveillance in operation.

The wash plant will be in operation when required in accordance with the site operating hours. No work will be undertaken in connection with the plant machinery outside of these approved hours or on any public or bank holiday.

Supporting documents such as the WRAP protocol, Dust and Emissions Management Plan, Odour Management Plan and a Noise Management Plan have also been produced to cover the use of the plant and current site operations.

Supporting document Wash plant Management plan will be formalised upon the trial and testing of the plant. This is covering the monitoring and maintenance of the plan including the management of wash water. The testing parameters of the wash water are to be agreed upon use of the plant. An improvement condition is requested to allow for accurate testing parameters to be agreed.

The permit is to be varied to add this activity, to formalise and ensure that site activities reflect the environment permit.

The benefits of the system that by rinsing, screening, scrubbing aggregates and soils removes residues and maximises the recycling of natural resource for reuse as a product.

3.6 Site Infrastructure and Equipment

3.6.1 Site Identification Board

A site identification board which is easily readable from outside the entrance during hours of daylight will be provided at or near the main site entrance.

The identification board will be inspected at least once per week. In the event of damage or defect that significantly affects the legibility of the board it will be repaired or replaced within a timescale agreed with the Environment Agency.

The board will display the following information:

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

3.6.2 Plant and Equipment

All items of plant and equipment used on site will be maintained in accordance with manufacturer's recommendations.

4.0 Emissions and Monitoring

The site will be operated so that there will be no point source emissions to air, surface water, groundwater or land.

4.1 Surface Water and Groundwater

The site will accept permitted wastes only and will be operated to prevent fugitive emissions to surface water and groundwater.

4.1.1 Engineered Containment

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

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

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

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

Before the washplant is installed the area will be fully concreted, kerbed and drainage system installed.

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

4.1.2 Containment Bunding

All potentially polluting materials for example oils and fuels will be stored in containers provided with secondary containment. Containers and secondary containment will be impermeable, resistant to the stored materials and constructed to the appropriate British Standard.

Containers will be surrounded by a leakage containment bund capable of containing at least 110% of the volume of the largest container within the bund or 25% of the total container volume within the bund, whichever is the greater.

Containers/Tanks will be inspected visually on a daily basis by the site staff to ensure the continued integrity of the containment and identify the requirement for any remedial action.

4.2 Odour

No putrescible or readily degradable wastes will be accepted at the site. Due to the strict control of the waste that will be accepted at the site, odour is not expected to pose a significant risk.

The procedure for managing complaints is detailed within the company Quality Environmental Management System.

An Odour Management Plan has been produced in respect to this application.

The management of odour is also detailed in Subsection 3.2.7 of the Working Plan and the company Quality Environmental Management System.

4.3 Dust

No waste consisting solely or mainly of dusts, powders or loose fibres will be accepted at the site. Due to the types of waste accepted and the enclosure of treatment operations for HCI wastes. Dust from the extraction system is collected within enclosed units located external from the processing building. These units are regularly emptied, and all collected dust is immediately disposed of.

External operations such as inert waste treatment will be carried out with the dust suppression hoses attached to the crusher. If the crushing activity begins to generate significant levels of airborne dust it will be halted immediately to allow for investigation.

In the event the generation of dust occurs during storage or treatment of wastes, this will be monitored and mitigation methods will be employed to reduce the risk of fugitive dust emissions.

Daily site inspections will be carried out by site management and site staff during the course of their normal working activities.

The procedure for managing complaints is detailed within the company Quality Environmental Management System.

An Dust Management Plan has been produced in respect to this application.

The management of dust is detailed in Subsection 3.2.6 of the Working Plan and the company Quality Environmental Management System.

4.4 Noise

Waste treatment operations will only be carried out during operational hours. All equipment will be maintained and operated in accordance with manufacturer's guidance and will be maintained in good working order.

The site will be operated so as to minimise noise emissions from the site. Measures that will be taken at the site include:

- locating plant away from noise-sensitive receptors where possible;
- the avoidance of dropping materials from height;
- switching plant off when not in use;
- the imposition of a speed limit for vehicles delivering waste to the site. The site has 5mph Speed Limit This will reduce noise associated with high engine speeds;
- the training of all personnel in the need to minimise site noise, and will be responsible for monitoring and reporting excessive noise when carrying out their everyday roles;
- regularly maintaining site plant and machinery to minimise noise resulting from inefficient operation of pumps, generators and engines;
- in the event that reversing alarms are found to give rise to complaints, alternative alarms or technology will be investigated;
- the regular maintenance of site surfaces to prevent the development of potholes will significantly reduce the noise generated particularly by empty vehicles exiting the site;
- consideration will be given to the fitting of noise suppression kits on items of plant and equipment; and
- all plant will be maintained in accordance with manufacturer's recommendations to minimise noise emissions.

Any complaint received will be logged in the site diary. The Site Manager will investigate the complaint and will take action to identify the source of the noise and implement remedial measures where appropriate.

The measures employed at the site to minimise the emission of noise will be regularly reviewed by the Site Manager and additional measures will be employed where required.

The procedure for managing complaints is detailed within the company Quality Environmental Management System.

A Noise Management Plan has been produced in respect to this application.

The management of noise emissions is detailed further in Subsection 3.2.8 of the Working Plan and the company Quality Environmental Management System.

4.5 Pests

Due to the nature of the wastes proposed to be accepted at the site, it is not anticipated that pests will pose a risk at the facility.

The facility will be inspected by both site management and operatives for infestations of pests, vermin and insects on a routine basis.

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

• Clearing of waste bays (internal or external);

• Use of pesticides;

• Use of bait boxes / bait traps;

• Employment of specialist pest controllers.

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

A specialist pest control contractor will be deployed if required.

The management of pests is further detailed in Subsection 3.2.9 of the Working Plan and the company Quality Environmental Management System.

4.6 Litter

Due to the nature of the waste to be accepted on site, it is not anticipated that litter will pose a serious risk.

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

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

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

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

In the event of any spillages of waste from the site boundary and into the local environment, it will be the responsibility of the TCM to arrange for litter picking of the affected areas within the same working day.

Any operation identified for the generation and escape of litter will be stopped, if required, until further measures can be taken.

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

Inspections will be carried out on a daily basis and a record maintained within the site diary.

The management of litter is further detailed in Subsection 3.2.5 of the Working Plan and the company Quality Environmental Management System.

4.7 Mud and Debris

It is therefore not expected that mud will feature as a problem for the site within the site, the following measures will be taken in order to prevent the deposition or tracking of mud or debris from the site onto public areas or highways:

- Good housekeeping practices are maintained at all times to ensure that the site is kept in a clean and tidy condition and to avoid the transport of mud and other detritus external to the site and surrounding areas.
- Vehicle access to the Site is directly from the road outside (West Line Industrial Estate) which is of tarmac construction.
- All vehicles are inspected for excess mud prior to leaving the site and, where necessary, cleaned off.
- The Site also makes use of an internal road cleaning service to ensure that the roads both on and off site remain clean.
- In the event that debris is generated from within the site it will be controlled by standard site management procedures, i.e. visual identification through the daily site inspection carried out by a competent person.

In the event that mud, debris or waste arising from the site is deposited onto public areas outside the site, the following remedial measures will be implemented:

- the affected public areas outside the site will be cleaned; and
- traffic will be isolated from sources of mud and debris within the site to prevent further tracking of mud and debris, and measures will be taken to clear any such sources as soon as practicable.

Inspections will be carried out on a daily basis and a record maintained within the site diary.

The management of mud and debris is further detailed in Subsection 3.2.4 of the Working Plan and the company Quality Environmental Management System.

5.0 Information

All relevant notifications and submissions to the Environment Agency regarding the site will be made in writing and will quote the permit reference number and the name of the permit holder.

Records will be maintained for at least 3 years, however in the case of off-site environmental effects, and matters which affect the condition of land and groundwater the records shall be kept until permit surrender. Duty of Care records will be kept for a minimum of 2 years with hazardous consignment notes retained for 3 years or the lifetime of the permit.

5.1 Reporting and Notifications

5.1.1 Changes in Technically Competent Persons

The Environment Agency will be informed in writing of any changes in the technically competent management of the site and the name of any incoming person, together with evidence that such person has the required technical competence.

5.1.2 Waste Types and Quantities

A summary report of waste types and quantities accepted and removed from the site for each quarter, will be submitted to the Environment Agency within 1 month of the end of the quarter unless otherwise required by the permit conditions.

5.1.3 Relevant Convictions

The Environment Agency will be notified of the following events:

- The company or directors being convicted of any relevant offence; and
- any appeal against a conviction for a relevant offence and the results of such an appeal.

5.1.4 Notification of Change of Operator's or Holder's Details

The Environment Agency will be notified of the following:

- any change in the operator's trading name, registered name or registered office address; and
- any steps taken with a view to the company going into administration, entering into a company voluntary arrangement or being wound up.

5.1.5 Adverse Effects

The Agency will be notified without delay following the detection of the following:

- any malfunction, breakdown or failure of equipment or techniques;
- any accident;
- fugitive emissions which have caused, is causing or may cause significant pollution; and
- any significant adverse environmental and/or health effect.

5.1.6 Closure

Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:

- the Environment Agency shall be notified at least 14 days before making the change; and
- the notification shall contain a description of the proposed change in operation.
- The Environment Agency shall be given at least 14 days' notice before implementation of any part of the site closure plan

6.0 Closure

This report has been prepared by Olive Compliance Ltd with all reasonable skill, care and diligence, and taking account of the manpower and resources devoted to it by agreement with the client. Information reported herein is based on the interpretation of data collected and has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of Remondis Ltd; no warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from Olive Compliance Ltd.

CDE

REMONDIS®

Remondis

OppID-00246
9th February 2024

CDE are delighted to offer our world class recycling solution for your proposed project. CDE currently help businesses like yours divert more that 14 million tons of material from landfill each year and return this material into the construction market. CDE wash over half a billion tons of sand each year for some of the

biggest companies the construction market carrying out some major infrastructure projects.

We feel that it is this experience that positions us well to understand the requirements to bring a waste material back into the construction market. Our direct to customer approach enables us to understand the complexity of each market and project first-hand and as a result provides us with real life experience to assist you in making the right decisions. We look forward to working through this project with you

Feed Material

Material	C&D & Trommel fines waste

Plant Data

Feed Capacity	Approx. Water Requirement	Approx. Energy Requirement
+50 tph	15m³ per hour (Top Up)	300kW

Please note, all data used to allow this budget quotation to be produced, is for reference only and is subject to testing. All data and values specified are assumed design calculation data for which we cannot accept any guarantees.

The client is responsible for providing a representative raw material feed analysis and final products specification requirements; any information provided by CDE is for indicative purposes only.

Proposed Layout

Proposed plant can be easily accommodated in your available area.

Proposed Process Description

PROPOSAL

ITEM 1: R SERIES™

Primary Feeding System

Model: R1500
Proposed Product Specifications:

- R1500 to be excavator fed
- Belt feeder
- Integrated mild steel hopper with replaceable Hardox wear liners around base of hopper
- Infinity P1-36 sizing screen (3.0m x 1.2m) with bespoke media
- Modular mild steel chassis
- Collection conveyor
- Galvanised GRP walkways and access steps, for easy access to both sides of the machine

CDE Infinity screen includes the following features:

- Galvanised finish
- All structural connections and sidewalls secured by vibration resistant fasteners including lockbolts
- Discharge chutes with wear liners specific to application
- Suspension units

The R-series is the market-leading primary feeding and screening system. Its unique design delivers unrivalled protection of your downstream processes. From clay bound gravel, rock and mineral ores to sticky construction, demolition & excavation waste and mine overburden the patented R-Series makes it easy to maximize product yield from a range of difficult feed materials. The integrated Infinity screen on your R-Series features tapered discharge chutes which ensure the efficient transfer of material from the screen to the integrated conveyors.

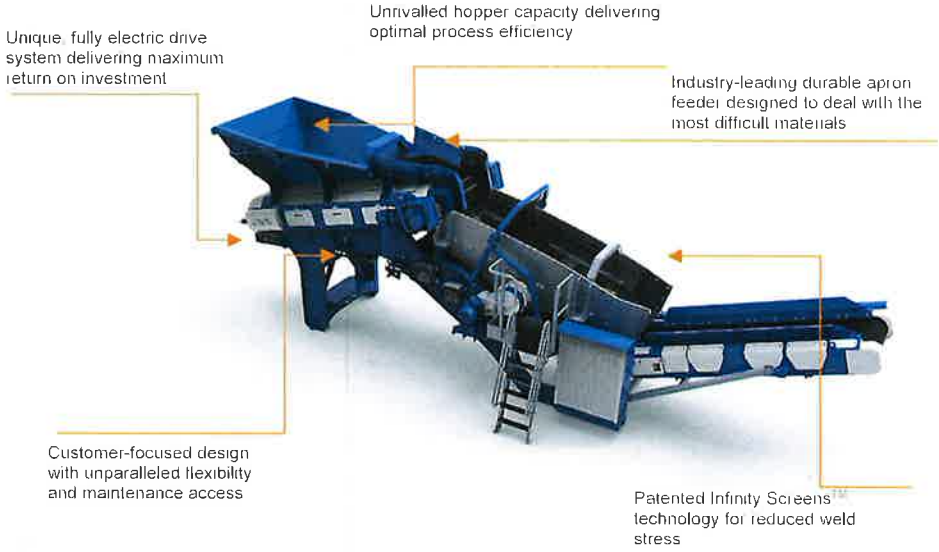


Photo is for illustrative purposes only and includes all available options. This does not necessarily reflect final product as proposed within.

Patents:
Infinity Screens™ P-Line
Trilogy side walls - GB 2505483, US 9643115 and CA 2882997. U-Span cross members – GB 2515489

ITEM 2: FEED CONVEYOR

Static Conveyors
Model: S2910

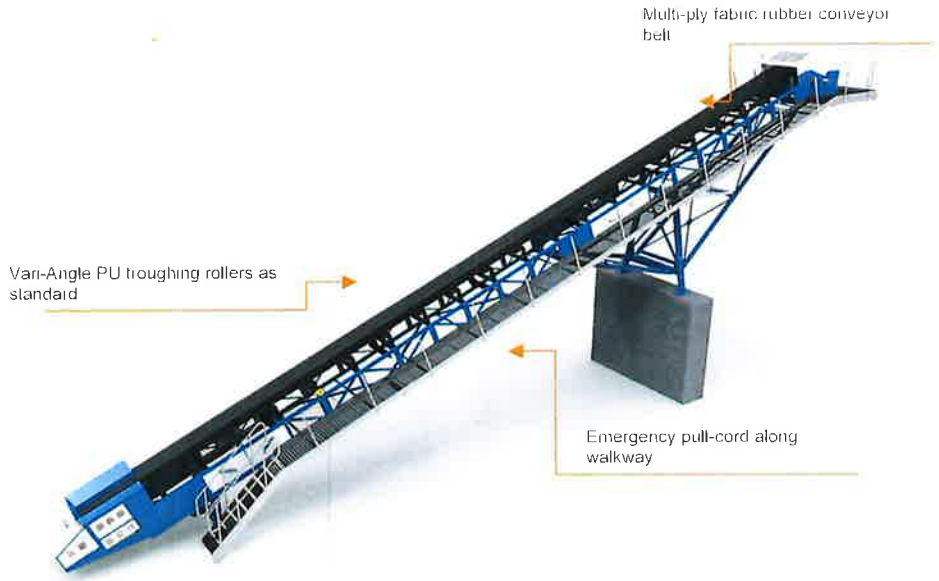
Proposed Product Specifications:

- Feedboot to receive material
- Multi-ply fabric rubber conveyor belt
- Tungsten tipped belt scraper
- Adjustable skirting rubbers
- Conveyor legs to wall as standard
- All necessary troughing and return rollers
- Motorised head drum
- Lagged head drum
- Crowned tail and head drums to assist belt tracking
- Guarded to CDE specification

Additional Specifications:

- Galvanised walkway along one side and around head section, complete with handrails and emergency pull cord (Static Conveyors only)
- SNL series bearings fitted on belt feeder to suit heavy duty application with exception of gearbox side of the head drum which is fitted with a Cooper split bearing unit to allow replacement without need of gearbox removal (Static Conveyors only)
- Beltweighers, Quantity x1
- Overband magnet, Quantity x1

CDE offer a range of conveyors for all your material transfer and stockpiling requirements. CDE conveyors are custom built to provide the optimum transfer point and plant layout. Only the highest quality components are used so that our conveyor is robust and long-lasting.



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ITEM 3: AGGMAX™

Scrubbing and Classification System

AggMax™	83
Pre-screen	H2-60 c/w oversize conveyor (1.5m x 4m)
Sizing Screen	H3-45 (1.5m x 3m)
Rotomax	RX80 (L7.6m x H3.0m x W2.2m)
Trash Screen	D1-43 (1.2m x 2.4m)

Model: 83SR
Proposed Product Specifications:

- Infinity H2-60 Pre-screen with mild steel sump and oversize conveyor
- RotoMax Twin Shaft Log Washer fitted with heavy-duty Xtryl cast paddle
  - Electric motor with VSD
- Infinity H3-45 sizing screen and mild steel sump
- Heavy duty centrifugal sand slurry pump complete with motor and drive
- Galvanised walkways and access stairs
- Infinity D1-43 trash screen and mild steel sump
- HydroFlux upward flow

All CDE Infinity screens include the following features:

- Galvanised finish
- All structural connections and sidewalls secured by vibration resistant fasteners including lockbolts
- Isenmann polyurethane screening media
- Spraybars fitted to screen (excluding trash screen)
- Discharge chutes with wear liners specific to application
- Firestone Marsh Mellow® supports – D-Line screens
- Suspension units – ProGrade and H-Line screens

This pioneering product continues to lead the wet processing industry with unrivalled return on investment. Packed full of unique features, its superior, world-class scrubbing action is proven to deliver results in the most abrasive of materials. This machine can be customised to meet your requirements with four pre-screen, recycling and three product screening options.

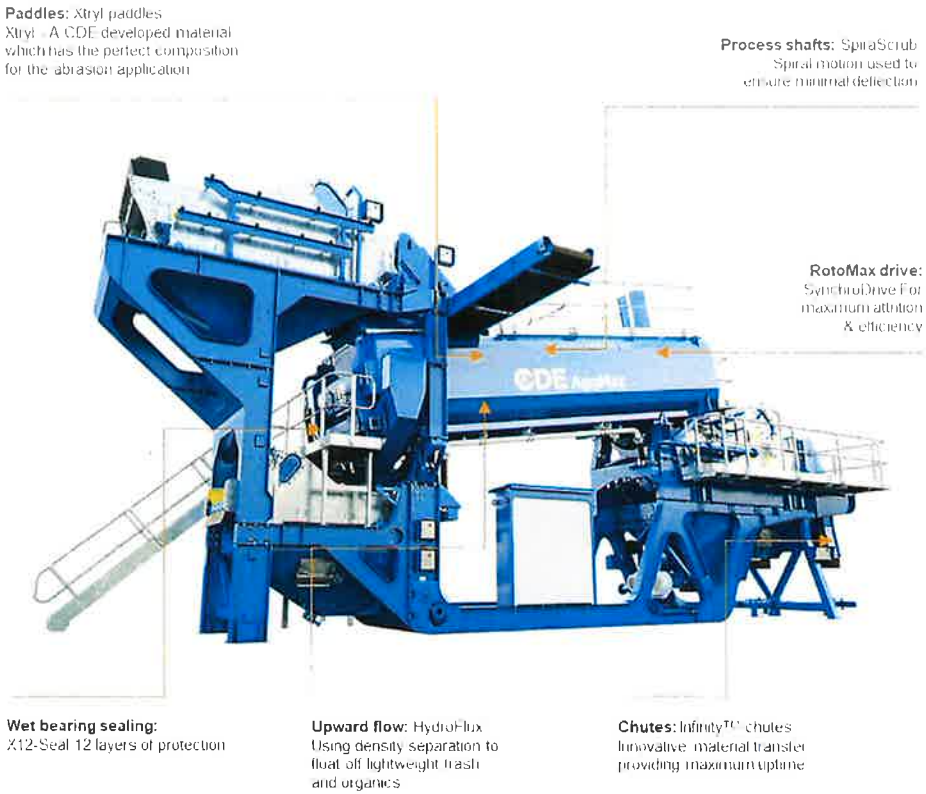


Photo is for illustrative purposes only. This does not necessarily reflect final product as proposed within

Patents:
Infinity Screens™ H-Line
Split bottom deck option for 4 products - US 10046365
Infinity Screens™ F-Line
Feedbox design - GB 2503812 and US 9636688
Combined Screening / Dewatering - GB 2524651 and US 9409208 B2
Infinity Screens™ D-Line/P-Line/H-Line/F-Line
Trilogy side walls - GB 2505483, US 9643115 and CA 2882997. U-Span cross members – GB 25154

ITEM 4: EVOWASH WITH CFCU

Density & Sizing Classification System

Model: Evo B.50.40.100.22

Proposed Product Specifications:

- Infinity D1-63 dewatering screen (1.8m x 2.4m)
  - Dual product
- Mild Steel cyclone frame
- Rubber lined modular cyclones
  - Overflow discharge chamber
  - Dual pass cyclone arrangement
- Mild steel sand slurry sump
- Heavy duty centrifugal sand slurry pump complete with motor and drive
- Screen cover independent of vibrating screen
- Galvanised walkways and handrails with GRP flooring and steps, for easy access and maintenance

CDE Infinity screens include the following features:

- Galvanised finish
- All structural connections and sidewalls secured by vibration resistant fasteners including lockbolts
- Isenmann polyurethane screening media
- Spraybars fitted to screen
- Discharge chutes with wear liners specific to application
- Firestone Marsh Mellow® supports

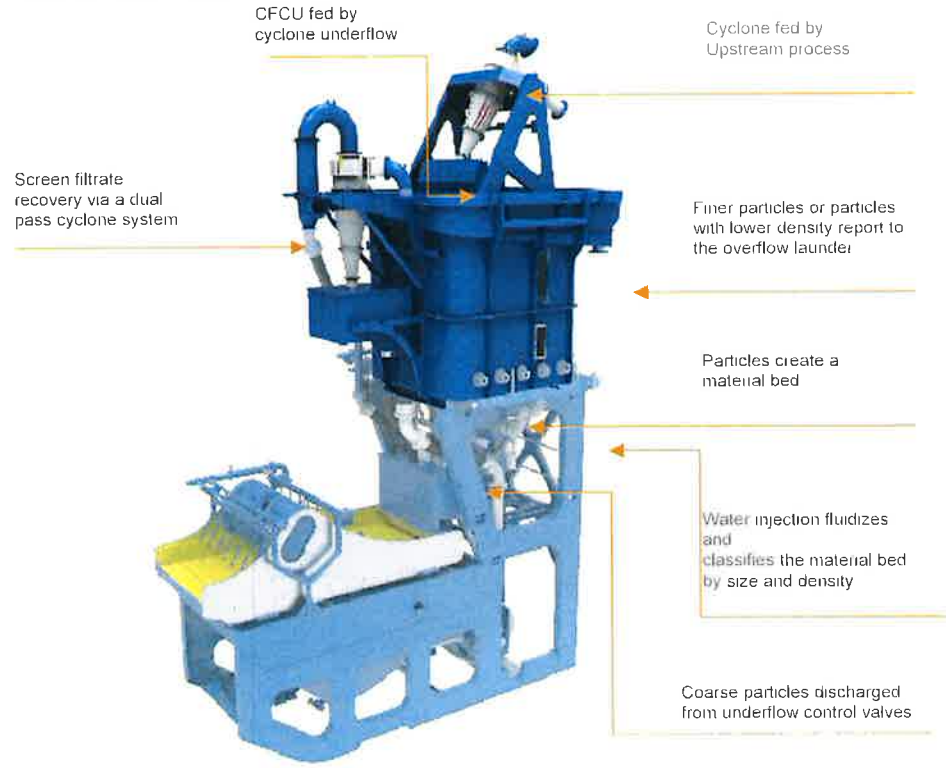
Model: CFCU 70

Proposed Product Specifications:

- Mild steel tank with rubber lined floor, overflow weir, feed box and discharge pipework
- Integrated water pipework and pneumatic flushing sequences
- Ceramic pressure transducer and PLC controlled pinch valves to monitor and control teeter bed height
- Digital flow meter to monitor upward flow water supply
- Support structure with integrated work platform
- Galvanised walkways

Developed over 25 years, our signature product, the EvoWash™, embodies CDE's focus on innovation and engineering excellence. This innovative Counter Flow Classification Unit (CFCU) provides an effective system for removal of lightweight contamination from your fine material fraction. Its unique features provide sand classification by mass & density where water is used to suspend particles at the cut point. This machine can be used in a wide range of applications such as:

- **Construction and demolition waste:** Recovery of sand
- **Recycling:** Removal of contamination
- **Glass sands:** Removal of organics
- **Concrete sands:** Control of fines
- **Casting/ Frac sands:** Control of particle size distribution



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Patents:
Infinity Screens™ D-Line
Trilogy side walls - GB 2505483, US 9643115 and CA 2882997, U-Span cross members – GB 2515489

ITEM 5: ORGANICS SCREEN

Patented Screening Technology

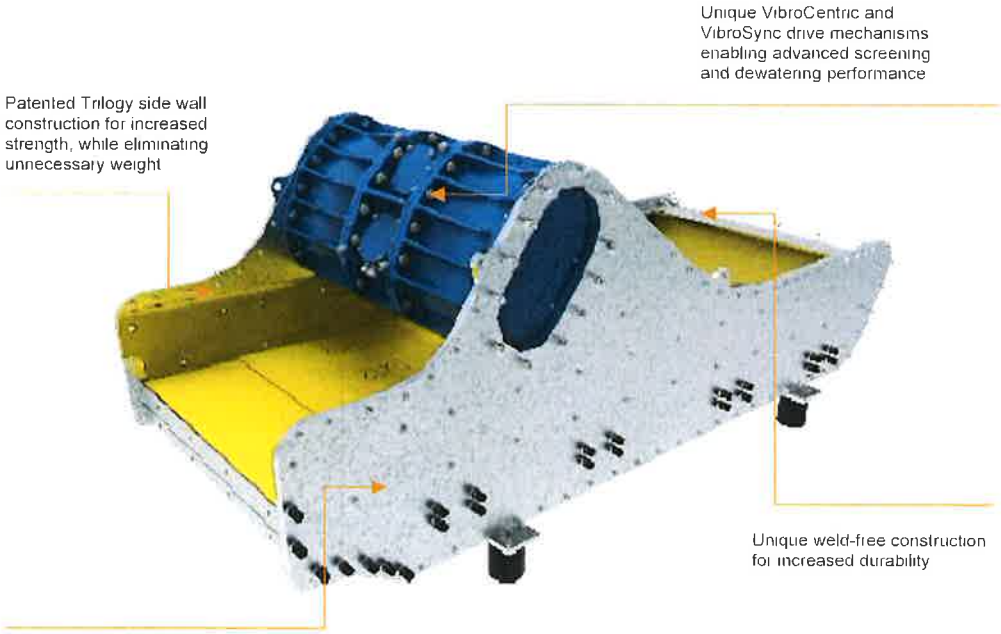
Model: D1-63 screen (1.8m x 2.4m)
Proposed Product Specifications:

- Mild steel filtrates sand slurry sump and support structure
- Feedbox
- Galvanised GRP walkways and access stairs

All CDE Infinity screens include the following features:

- Galvanised finish
- All structural connections and sidewalls secured by vibration resistant fasteners including lockbolts
- Isenmann polyurethane screening media
- Anti-Pegging spraybars fitted to screen
- Discharge chutes and wear liners specific to application
- Firestone Marsh Mellow® supports

CDE Infinity Screens™ are a unique range of circular and linear motion screens for optimal performance and reliability. It is a comprehensive range of screening solutions with innovative technology to suit every application.



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Patents:
Infinity Screens™ D-Line:
Trilogy side walls - GB 2505483, US 9643115 and CA 2882997. U-Span cross members - GB 2515489

ITEM 7: CONVEYORS

Horizontal Transfer Conveyor
Model: H0710

Conveyors without walkways
Model: M1265
M0765

Proposed Product Specifications:

- Feedboot to receive material
- Multi-ply fabric rubber conveyor belt
- Tungsten tipped belt scraper
- Adjustable skirting rubbers
- Conveyor legs to wall as standard
- All necessary troughing and return rollers
- Motorised head drum
- Lagged head drum
- Crowned tail and head drums to assist belt tracking
- Guarded to CDE specification

CDE offer a range of conveyors for all your material transfer and stockpiling requirements. CDE conveyors are custom built to provide the optimum transfer point and plant layout. Only the highest quality components are used so that our conveyor is robust and long-lasting.

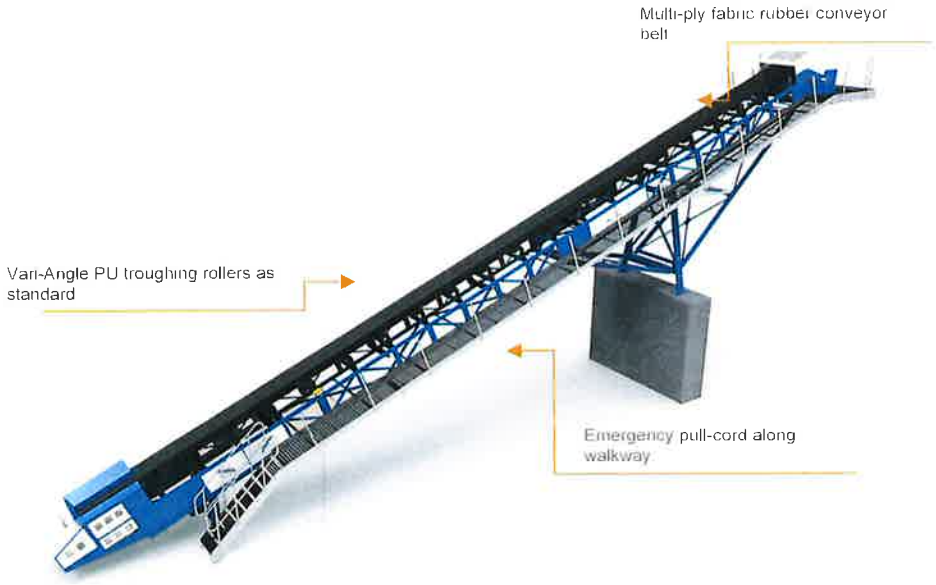


Photo is for illustrative purposes only and includes all available options. This does not necessarily reflect final product as proposed within.

ITEM 8: AQUACYCLE™

High-rate thickener for primary stage water management

Model: A400
Proposed Product Specifications:

- Mild steel thickener tank with flushing valves and pipework
- CDE optimised slurry feed system including multiple poly dosing locations, integrated deaeration chamber and centre feedwell
- Rake torque monitoring system for accurate sludge level control including motor, gearbox and heavy-duty transmission shaft
- Rake support bridge and galvanised walkways and access
- Centrifugal pump to discharge thickened sludge
- The AquaCycle requires constant uninterrupted 3-phase power supply
- Compressor fitted into cabin for pneumatics
- PLC Control panel fitted into 12m control cabin
- FlocStation installed and pre-tested in control cabin
- CDE 'Autofloc' Polymer Dosing Monitoring System
- CDE scum scraper – rotating skimmer located at the top of the AquaCycle
- Anti-Foam & COAG dosing unit and pumps

AquaCycle™	A400
Height (m)	6.6
Width (m)	10.5
Diameter (m)	8.0

The AquaCycle™ is a high-rate thickener, recycling up to 90% of the process water for immediate re-use in the system. It is a cleaner, more environmentally-friendly solution designed with a minimal footprint.

Photo is for illustrative purposes only and includes all available options. This does not necessarily reflect final product as proposed within.

Patents:
Slurry concentrator GB 2488995

ITEM 9: AQUASTORE WITH STATIC SCREEN

Model: AS100
Proposed Product Specifications:

- 100m³ sectional steel water tank complete with water recycle pump
- Radar Sensor for measuring water level
- Manual drain valves
- Inspection hatch

Model: CDE Static Screen
Product Specifications:

- Static Screen for removal of lightweights
- Inlet chamber to distribute evenly over width of screen
- Horizontally slotted apertures
- Gravity Solids discharge
- Galvanised Access Stairs & Platform for Static Screen
- Water pipework to enable attachment of Static Screen over AquaStore

The AquaStore system is designed to make your processes more efficient and environmentally friendly. It is a skid frame pumping system for use in the water treatment phase of sand washing, quarrying and recycling operations. The AquaStore receives recycled water from the AquaCycle thickener which is then recirculated, reducing the volume of fresh water required to feed your washing plant.

Photo is for illustrative purposes only and includes all available options. This does not necessarily reflect final product as proposed within.

ITEM 10: BUFFER TANK

Complete sludge storage and pumping system

Model: BS100
Product Specifications:

100m³ Buffer Tank – Sectional Steel
Agitators to meet sludge requirements
Buffer tank walkway/ agitator frame (No access stairs)
Supported by tank assembly
Radar sensor for level control
Manual drain valve
Inspection hatch

Photo is for illustrative purposes only and includes all available options. This does not necessarily reflect final product as proposed within.

ITEM 11: FILTERPRESS

Filtration System

Model: X1-60
Proposed Product Specifications:

- Filter press with upper beam, fixed and mobile header
- Embodied filtrate manifold
- Automatic plate shifting device
- High pressure cloth washing system
- Cloth Wash pump and Feed pump with gland seal kit
- Drip tray
- Electrical control panel with Siemens PLC
- Support frame for press with walkway and access stairs to be mounted on walls
- Press Housing
- Flow meter
- Compressor
- Air Receiver Tank
- Core Wash pump

Filter Press	1500
Recessed Plates	Polypropylene
Chamber thickness (mm)	25
Total Filter press Volume (L)	5594.4

Filter Press delivers unrivalled dewatering technology that minimises waste and recycles up to 95% of the process water. It is designed and built to deliver maximum plant efficiency, eliminating the need for tailings dams or settling ponds - significantly reducing waste handling

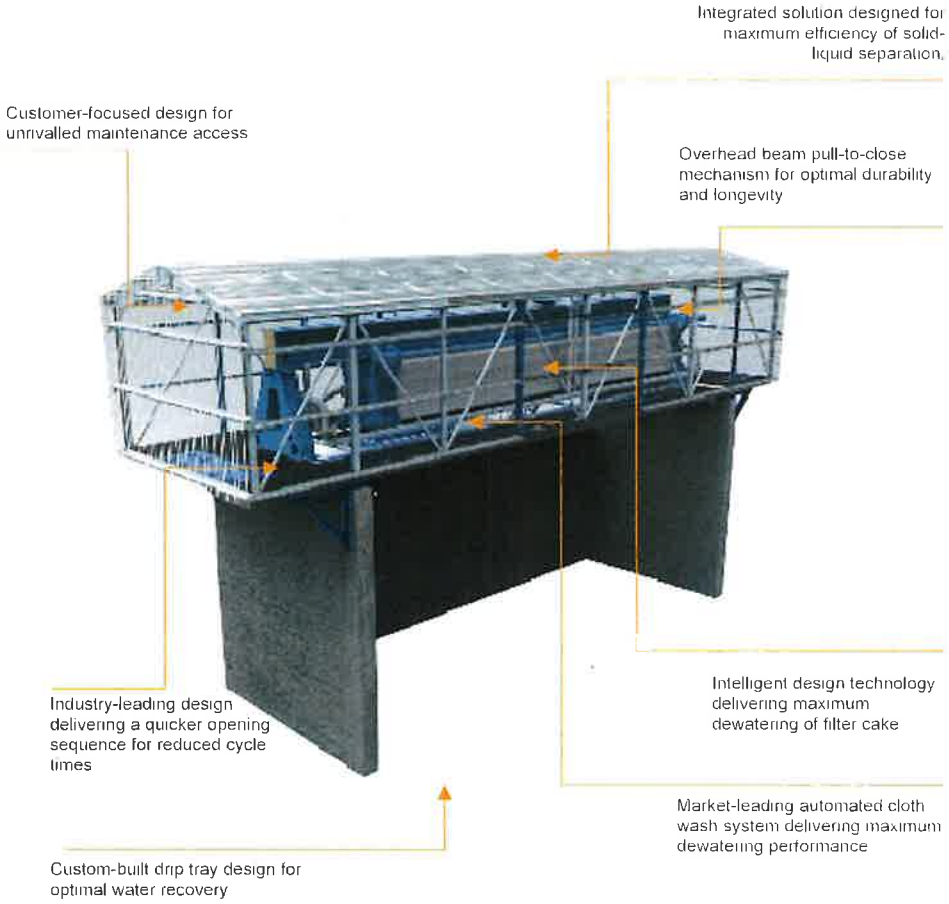


Photo is for illustrative purposes only and includes all available options. This does not necessarily reflect final product as proposed within.

Olive Compliance Ltd disclaims any responsibility to the client and others in respect of any matters outside the agreed scope of the work.

Document References

Working Plan

Fire Prevention Plan EMS004

Drawing References

Site Layout Plan

Drainage Plan (current)

Washplant Management Plan

Remondis Ltd

West Line Industrial Estate

Birtley

Chester Le Street

County Durham

DH2 1AU

Olive Compliance Ltd
Planet House, Northumbrian Way, Killingworth
NE12 6EH
Company Number:12861220

CONTENTS

1.0 INTRODUCTION 3

1.1 Washplant Information 3

1.2 Monitoring Requirements 5

1.3 Sampling Locations 5

1.4 Monitoring Frequency 5

2.0 SAMPLING 6

2.1 Site Supervision and Sampling 6

2.1.1 Infeed Circulated Water Supply 6

2.1.2 Testing 6

2.1.3 Reporting 6

3.0 REVIEW OF TESTING RESULTS 6

3.1 Sampling Limits 6

3.1.1 Compliance 6

3.2 Review of Data 7

3.3 Reporting to the EA 7

3.4 Remediation 8

3.5 Investigation Process 8

4.0 CONCLUSION 8

1.0 Introduction

This document is the proposals of the management of water arising from the washing of aggregates and soil waste received at West Line Industrial Estate, Birtley, Chester Le Street, County Durham, DH2 1AU.

Due to the low risk associated with the washing process, it is considered that quarterly monitoring and laboratory analysis of wash water is sufficient to regulate its quality. This is because operation of the wash plant and the use of flocculant are consistent processes, subject to minimal change. Washed aggregates are clean and inert, and tested post process.

1.1 Washplant Information

Detailed specifications and layouts for the proposed wash plant are included in the OT documents.

However, as an outline, it can be confirmed that Inert waste will be fed into the system via a conveyor, from which the washing and grading process will begin.

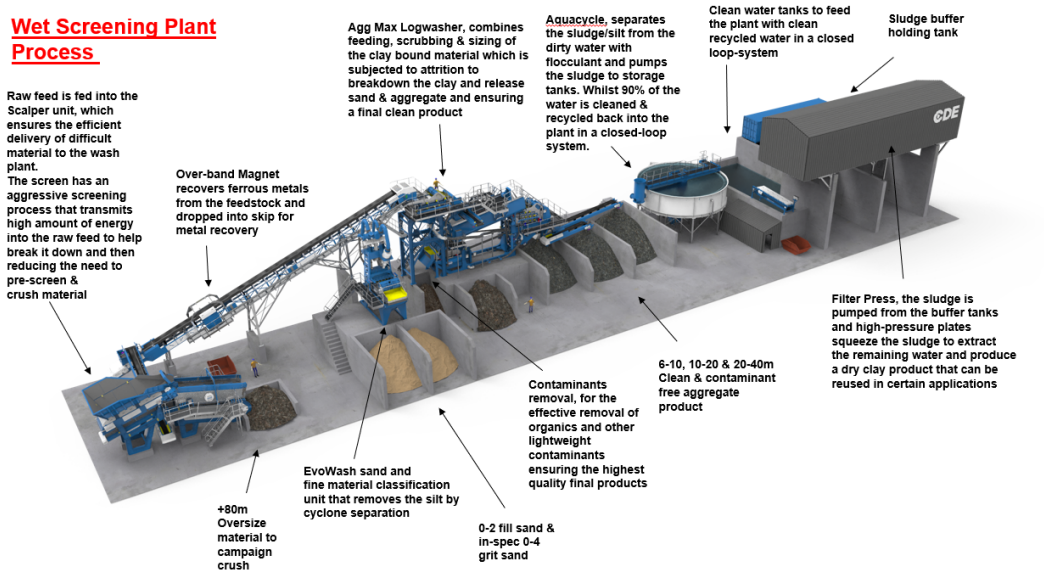
Wash water is contained within a closed loop system, with the principal wash elements to include:

Detailed specifications and layouts for the proposed wash plant are included within the Operating Techniques document.

Wash water is contained within a closed loop system, with the principal wash elements to include:

- Cleanwater Tank,
- Aquacycle System,
- Aggmax Logwasher;
- Evowash System;
- Sludge Tank,
- Filter Press

Image 4 – Wash plant System



The wash plant will be monitored and operated by a trained plant operator and will process incoming feedstock wastes (C&D aggregates/soils) in accordance with the sites current allowed annual throughput.

The wash plant can process 50 tonnes of waste per hour, with infeed water supplied and topped up via the clean water tank.

The wash water will be re-circulated within a closed loop system, with filter cake dewatered prior to leaving the plant to retain as much water as possible.

Physical barriers will be put in place to minimise water loss through the wash process. It is anticipated that 95% of water will be retained by the plant. As such, it is estimated that the daily 'top-up volume' will be less than 15m^3 per day.

A flocculant will be used to aid with the removal of suspended particles and aid with wash water retention and fines extraction. The flocculant is Non-Hazardous and has low mobility in soil and all components used in its manufacture are included in the European Inventory of Existing Chemical Substances (EINECS) or are not required to be listed on EINECS.

Final aggregate gradings will depend on plant operations, however, at this stage, it is considered the following product and filter cake gradings can be achieved.

- 6-10 mm single size,
- 10-20 mm single size,
- 20 - 40mm single size,
- Fine sand 0- 2mm,
- Grit sand 0-4mm,
- Filter Cake (Clay for reuse)

Following washing and grading, aggregates will be stored in material storage bays which is underlain by an impermeable surface limiting the migration of residual wash water.

All plant and equipment must comply to PUWER regulations and operators must carry out prestart inspections on all plant and equipment.

A maintenance schedule is in place which includes servicing, calibration and preventive maintenance. All equipment on 3 phase power supply are subject to a 6 monthly EIRC by a competent contractor.

Return valves are installed where required, gate valves are also secured to prevent accidental release and all operators must be trained and competent.

Emergency procedures will be put in place which will include for the following:

- Maintain a stock of repair patches
- Spill kits to be kept on site and around wash plant area,
- Emergency spillage drills to be carried out
- Sludge tank and pipework emptied
- A maintenance schedule is in place which includes servicing, calibration and preventive maintenance
- 24hr Remote CCTV surveillance in operation.

The wash plant will be in operation when required in accordance with the site operating hours. No work will be undertaken in connection with the plant machinery outside of these approved hours or on any public or bank holiday.

The permit is to be varied to add this activity, to formalise and ensure that site activities reflect the environment permit.

The benefits of the system that by rinsing, screening, scrubbing aggregates removes residues and maximises the recycling of natural resource for reuse as a product.

1.2 Monitoring Requirements

The following monitoring is proposed to fulfil requirements of the Environmental permit.

Table 1
Water Analytical Suite – Washplant

Borehole	Parameter	Frequency
	Cd, Cr, Cu, Fe, Pb, Zn, Ni, Mn, Al, Total TPH and PAH	Quarterly

1.3 Sampling Locations

Details of the sampling points are presented in Table 2.

Table 2
Details of Water Monitoring Points

Monitoring Point	Type	Location	Purpose
Wash plant water supply	Inline sampling	Wash Plant	Wash plant water supply – recirculated

1.4 Monitoring Frequency

REM will conduct quarterly monitoring of water quality and inline circulated water supply to the wash plant.

Table 3 - Washplant Water Monitoring Schedule

Monitoring Event	Date
1	Q1 January – March 2023
2	Q2 April – May 2023
3	Q3 June – Sept 2023
4	Q4 Oct – Dec 2023

2.0 Sampling

2.1 Site Supervision and Sampling

All sampling activities will be completed by a suitably trained engineer/consultant, in general accordance with BS EN ISO 15667-11:2009.

All samples will be taken within appropriate sampling containers and transported to the laboratory within 24hours of sampling.

2.1.1 Infeed Circulated Water Supply

In feed samples for chemical analysis will be collected during each monitoring visit from each monitoring location using dedicated disposable bailers.

2.1.2 Testing

Samples taken will be analysed as per the above determinands detailed by the Operator.

2.1.3 Reporting

The testing company will issue a report that include the following:

- Factual information on the work undertaken, including , Laboratory testing certificates.

Monitoring equipment, techniques, personnel and organisations employed for the monitoring programme shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available.

The proposed sampling will be undertaken by: TBC

3.0 Review of Testing Results

3.1 Sampling Limits

3.1.1 Compliance

Maximum assessment levels and trigger levels have been set for the below selected parameters.

TBC upon installation and plant trials and testing – to be included as an Improvement Condition

Draft proposals below.

Table 4 - Assessment and trigger levels for water sampling

Substance	Maximum Concentration	Proposed Trigger Level	Notes
Chromium Tin Arsenic Cadmium	3.4 25 50 0.45	2.7 20 40 0.08	These figures refer to the total of chromium III and chromium VI, but are based on the EQS for chromium VI. These values are for total concentrations. These values are the maximum and annual averages respectively for the lower limit of the range specified for different hardness values.
Copper Iron Lead Zinc Nickel Manganese Aluminum Total TPH's Total PAH's	1 1000 1.2 10.9 4 30 10 No visible oil films 0.27	0.8 800 0.9 8.7 3.2 24 8 No visible oil films 0.2	Based on a bioavailability. Based on a bioavailability. Based on a bioavailability. Based on a bioavailability. The EQS for manganese is being reviewed. Lower value(s) will be based on bioavailability. The EQS for aluminium is being reviewed. Lower value(s) will be based on bioavailability. Based on benzo(a)pyrene concentration only. 0.27 is the maximum allowable. We need concentrations which are much lower to ensure the annual average is 1.7 x 10-4.

The above is taken from the Environmental Quality Standards (EQS) for fresh or inland water, issued by the Environment Agency and SEPA.

The water will not be discharged however sampling methodology has been based on the risk of residual water within finished product or may leak from the lagoon or be lost when applied for dust suppression.

3.2 Review of Data

The Operator will review the testing results (usually received within 5days) against the limits in Table 4. Any exceedances of the above limits will automatically action the cessation of the wash plant.

3.3 Reporting to the EA

Records of all testing, sampling, wastewater disposal and appropriate duty of care records will be retained for inspection by the Environment Agency.

A Schedule 5 notification will also be sent to EA within 24hrs of any exceedances identified with further communications regarding remedial actions.

3.4 Remediation

The water system will then be shut down, with washing activities ceased. The wash plant will be drained directly into the closed sump and the system flushed using mains water, then and cleaned with Airopure, then flushed again.

The wastewater will then be sent to a permitted waste facility, with additional testing conducted if required to identify the properties of the wastewater to identify the appropriate legal waste recovery/disposal route before removal off site.

Within 2 weeks of the wash plant recommencing activities, further infeed water testing will be undertaken within the wash plant to demonstrate water quality and elimination of contamination.

3.5 Investigation Process

In the event there are exceedances of determinants within the testing suite, an audit of all incoming wastes received and processed from the previous month will be undertaken to identify any potential sources of contaminated inert material received on site and comparison with testing results.

Checks will include pre acceptance testing, external site visits, aggregate testing, daily inspections, and potential site issues such as (failure of plant/equipment/leaks).

In the event waste materials or products on site are identified as the source of the exceedance, testing will be conducted to classify any hazardous properties within the material and to identity recovery or disposal routes where appropriate.

Contact with clients and customers will also be undertaken.

4.0 Conclusion

This document is considered to be a ‘working’ document that will be reviewed and updated annually or as required should any of the following occur:

- An exceedance of testing parameters on site;
- the results of any testing of this document indicate that changes are required;
- a change or review of legislation; or
- if the site is instructed to do so by the EA.