

Hughes & John
Inert Materials Recycling Facility
The New Croft Garage
Cresselly
Kilgetty
Pembrokeshire
SA68 0TU

Environmental Management System Document
August 2013

**Document to be read in conjunction with NRW
Bespoke permit application forms, CIWM &
WAMITAB Operator Competence Scheme and
Planning permission approvals 08/595/PA &
04/1096/PA.**

Environmental Management System Document. (EMS document)

SECTION 3. Permitted Activities

The bespoke permit required for the Inert Recycling centre is due to the criteria that there is a small watercourse running through the facility from west to east, as shown on the general location plan and the Site Operation Management Plan.

The Site is designed with the Permitting of the Facility for the Treatment of Waste to produce soil, soil substitutes and aggregate.

The Activities that are permitted at the facility include the R13 Storage of Wastes pending the operations R3 / R5 for Recycling and Reclamation of inorganic materials as specified in the coding from the National Resources Wales as detailed below:-

01 04 wastes from physical and chemical processing of non-metalliferous minerals

10 01 waste from power stations and other combustion plants

10 01 01 bottom ash and slag only

10 01 02 pulverised fuel ash only

10 01 05 gypsum (solid) only

10 01 07 gypsum (sludge) only

10 01 15 bottom ash and slag only from co-incineration other than those mentioned in 10 01 14

10 11 wastes from manufacture of glass and glass products

10 12 wastes from manufacture of ceramic goods, brick, stiles and construction products

10 12 08 waste ceramics, bricks, tiles and construction products (after thermal processing)

10 13 wastes from manufacture of cement, lime and plaster products and articles and product made from them

10 13 14 waste concrete only

17 01 concrete, bricks, tiles and ceramics

17 03 bituminous mixtures, coal tar and tarred products

17 03 02 road base and road planings (other than those containing coal tar) only
17 05 soil (including excavated soil from contaminated sites) stones and dredging spoil
17 08 gypsum based construction material.

19 05 wastes from aerobic treatment of solid waste
19 05 03 compost from source segregated biodegradable waste only
19 08 02 washed sewage grit (waste from de-sanding) free from sewage contamination only
19 08 99 stone filter media if free from sewage contamination only
19 09 wastes from the preparation of water intended for human consumption or water for Industrial use
19 09 02 sludges from water clarification
19 12 wastes from the mechanical treatment of wastes
19 12 05 clean glass only
19 12 09 minerals (for example sand, stones)
19 12 12 treated bottom ash including IBA and slag other than that containing dangerous substances only
19 13 wastes from soil and groundwater remediation
19 13 02 solid wastes from soil remediation other than those mentioned in 19 13 01
19 13 04 sludges from soil remediation other than those mentioned in 19 13 03
20 02 02 soil and stones

Please Note in terms of site capacity there is a restriction required by the planning permission 04/1096/PA condition no 11, for no more than 25,000 tonnes of the above type of material in the calendar year. (See Section 13 Documentation of other Legislation & other requirements.

Environmental Management System Document. (EMS document)

SECTION 4 Waste Acceptance.

Waste shall only be accepted if:

(a) It is of a type listed below;

01 04 wastes from physical and chemical processing of non-metalliferous minerals

10 01 waste from power stations and other combustion plants

10 01 01 bottom ash and slag only

10 01 02 pulverised fuel ash only

10 01 05 gypsum (solid) only

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10 11 wastes from manufacture of glass and glass products

10 12 wastes from manufacture of ceramic goods, brick, stiles and construction products

10 12 08 waste ceramics, bricks, tiles and construction products (after thermal processing)

10 13 wastes from manufacture of cement, lime and plaster products and articles and product made from them

10 13 14 waste concrete only

17 01 concrete, bricks, tiles and ceramics

17 03 bituminous mixtures, coal tar and tarred products

17 03 02 road base and road planings (other than those containing coal tar) only

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19 12 09 minerals (for example sand, stones)
19 12 12 treated bottom ash including IBA and slag other than that containing dangerous substances only
19 13 wastes from soil and groundwater remediation
19 13 02 solid wastes from soil remediation other than those mentioned in 19 13 01
19 13 04 sludges from soil remediation other than those mentioned in 19 13 03

20 02 02 soil and stones

b) It conforms to the description in the documentation supplied by the producer and holder;

(c) Its chemical, physical and biological characteristics make it suitable for its intended treatment;

(d) Any excavated soil from potentially contaminated sites has been shown by prior chemical analysis and assessment to be suitable for the intended use without significant risk of pollution;

(e) It is visually inspected on arrival and before it enters the treatment process to ensure that it complies with the permitted materials.

Any waste that does not comply shall be rejected and shall be;

(a) Removed from the site; or

(b) Moved to a designated quarantine area pending removal.

Records demonstrating compliance (including analysis and assessment of any excavated soil from potentially contaminated sites) shall be maintained.

Environmental Management System Document. (EMS document)

SECTION 5 Identifying and minimising risks of pollution

This particular section, along with other parts of the **EMS** is more easily understood in terms of the process by a clear and accurate working plan.

Please see attached a copy of the general working plan of the recycling facility.

The Plan is shown at 1:1,000 scale for document purposes and also a larger plan scale of 1:500 for display within the General Office.

This plan shows that all the possible sources of pollution are identified and that all activities are shown in areas that include the following-

Process operation-

Plant and machinery-

Waste disposal-

Solid waste management

Emissions / discharges-

Water use discharges-

Raw materials used-

Storage of materials on site –

Transportation and distribution –

The Plan will be revised on an annual basis to show the best practices and improvements to the recycling operation.

The above areas are identified in detail in respect of the daily operations and maintenance of the plant machinery, haulage vehicles, incidents and non conformances.

Environmental Management System Document. (EMS document)

SECTION 6. Operations and Maintenance

The Inert Recycling Site is guided by the clear control of Operation and maintenance from the Management.

All plant and equipment will be in-house supplied or sourced from industry approved suppliers and maintenance carried out to the manufacturers recommendations.

Storage areas for goods such as input materials, equipment and products are identified to ensure that such goods are stored to prevent contamination and deterioration and can be maintained in accordance with regulatory requirements.

The operation of the inert recycling operation begins with the Briefing Note of

Duty of Care- Your Responsibilities

All those who produce or handle wastes from demolition, earthworks and construction activities have legal responsibilities — Duty of Care - for its safe keeping, transport and subsequent recovery or disposal. Failure to comply can result in an unlimited fine.

Duty of Care is a legal requirement under Section 34 of the Environmental

Protection Act 1990. Detailed requirements for waste transfer notes are set out in

the Environmental Protection (Duty of Care) Regulations 1991. 'Waste

Management —The Duty of Care, Code of Practice' was published by the

Government in March 1996,

Duty of Care requires you to take care of your waste while it's in your control, check that the person to whom you give the waste is authorised to produce and transport it, make sure that every consignment of waste has a waste transfer note when the waste is handed over and to take all reasonable steps to prevent unauthorised handling or disposal by others.

The transfer note must include:

- What the waste is, how much there is and its 6-digit European Waste Code
- What sort of containers it is in.
- The time, date and place the waste was transferred.
- The names and addresses of both persons involved in the transfer.
- Details of which category of authorised person each one is e.g. producer registered waste carrier, waste licence holder
- If either of the persons is a registered waste carrier, the certificate number of the registration
- If either of the persons has a waste management licence, the licence
- Where appropriate, the name and address of any broker involved in the transfer of waste
- Signed by both parties, and transfer notes kept for two years

All consignments of waste "MUST" be checked prior to being unloaded. No Rubbish (pipes, cement bags, plastic or wood etc) will be deposited in the storage areas.

If we are found depositing rubbish in our raw waste storage bay we may be liable to fines and prosecution. Contaminated material will slow down our processing activity and will make operations less efficient.

All foreign bodies or waste rubbish "MUST" be deposited in the designated skip located in the quarantine area

The operation at the inert recycling facility is governed by the Method Statement of Production and is as follows-

Materials accepted for processing

The majority of inert waste is soil mixed with asphalt, concrete and brick.
The only accepted wastes will be as follows

European Waste Catalogue Code	Description	Restrictions
17 01 01	Concrete	Selected construction and demolition waste acceptable only with low content of other types of materials (like metals, plastics, organics, wood, rubber etc) The origin of the waste must be known.
17 01 02	Brick	Ditto
17 05 04	Soils and stones including gravel	Excluding clay and chalk
17 05 08	Crushed rock, sand, road base and planings, track ballast	Ditto

The Manufactured Products will be to industry standards but the recycling process can produce to the specific requirements of the customer.

They are normally as follows

Product	General Description
5-20mm Recycled Aggregate comprising asphalt	A graded recycled aggregate of concrete, brick, granite, gravel,
5-20mm 50/50 blended aggregate comprising	A graded blended aggregate
	of recycled aggregate and natural gravel
Finefill	General fill soil graded to less than 5mm
Top-soil	Low grade top soil graded to less than 5mm

The Inert Recycling Operation

Incoming waste materials

Information to be supplied

Hughes & John are required by law to obtain and maintain certain records on the waste we receive for inspection by the relevant authorities. Therefore the regulatory information will be obtained from the waste transfer notes (Receipt of Waste Materials).

Material details, location of arisings, and date will also be recorded on the waste transfer notes.

Responsibilities

The Management is responsible for validity of the carriers licence.

Records to be maintained

Waste transfer notes are to be kept for 2 years and filed in the office.

— Receipt of waste materials

Arrival

When a delivery of inert waste arrives the Management will inspect the Waste Transfer Notice (WTN) and check all the relevant fields are completed. He will question the driver on the contents of the load and visually satisfy himself that the description on the WTN is correct. Once the Management is satisfied he will direct the driver to tip in the appropriate storage bay. Once the load has been tipped the Staff will visually inspect again to ensure it meets the acceptance criteria as contaminants may be hidden in the bulk of the load.

Accepted Loads

Once the Management Staff has accepted a load of inert waste he will make an entry into the Register of Deliveries

This form requires the following information

- Date
- Waste Transfer Note No
- Waste type
- Place of origin
- Quantity (tonnes)
- Feedstock Category
- Reason for rejection at tipping (if applicable)

This form is compiled as loads are delivered and submitted weekly to the Management Administration.

Categorising.

Once the load has been tipped in the correct storage area the Senior Supervisor or Waste Management Technician will hand pick foreign materials from the load and place in the appropriate skip, for future disposal or recycling.

Rejections

Loads not accompanied by a waste transfer note will be rejected as not compliant with legislation. If a load is not acceptable for processing the driver will be instructed to deliver to the nearest registered landfill. If the load has already been tipped then it will be reloaded and the driver instructed to deliver to the nearest registered landfill

Re-inspecting and Stockpiling

The Management has the responsibility to categorise the incoming waste material and store in the correct location.

To avoid bays over spilling it will be necessary to heap the stockpiles up by using the shovel loader. This will provide another opportunity to hand pick foreign materials from the stockpile.

Production

This section of the **EMS** covers the production stage from obtaining the feedstock from the stockpiles and ensuring that the equipment and plant are performing as expected.

The following should be read in conjunction with section "Method Statement of Production" which demonstrates the processes involved.

Process Control (Input materials and equipment)

Input materials

The feedstock material needs to be inspected by the operator before being fed to the process to verify that it has not degraded during storage (e.g it is too wet because it has been exposed to rain, it has been mixed with other material, etc)

If the material has been exposed to rain it should be left to dry and no processing should take place. If it has been mixed with other material then the operator will remove it to the storage space allocated for removal to landfill and complete an NCR.

Equipment

Staff that have been trained to operate the plant are authorised to process the feedstock material.

3-way Screener

Material fed into the screener should be slowly tipped onto the griddle bars. The operator checks that the material is being screened correctly by visually examining the material leaving the conveyors. If the material is not being screened correctly, then all stockpiles beneath the conveyor should be placed into the appropriate storage bay for future processing. All screening is to stop until the problem has been rectified by the Fitter.

The Staff will remove the stockpiles produced by the screener by vehicle or shovel loader to the appropriate storage bay.

Crusher

A machine operator will load the crusher and the operator will visually observe the entry of the material into the crushing plant. He will remove by hand any foreign material observed and place in the appropriate skip for disposal or recycling. The Staff will remove the crushed material to the appropriate stockpile area.

Blending

For the 50/50 blend product, the operator will take three shovel buckets of natural gravel and three buckets of recycled aggregate and place both in the 50/50 blend storage bay. He will then proceed to mix the aggregate with the shovel bucket by spreading and heaping the material through the bay a minimum of six times. The Management will complete the daily process control record.

The Finished Product

The following tests will be applied to the finished products

Product: 5-20mm 50/50 Blend [Blend of 50% Recycled Aggregate and 50% Natural Gravel]

Location: 50/50 Blend storage bay at Recycling Depot

Finished products

Test	Method	Compliance	Initial Test Frequenc
Particle Size Distribution	BS EN 933-1 :1997	BS EN 12620:2002 Tables 2 and 4	1 per week
Flakiness	BS EN 933-3 :1997	Category FI35	1 per week
Fines Content	BS EN 933-1 :1997	f4 (BS 8500-2:2002 will accept up to 5%)	1 per week
Resistance to fragmentation — Los Angeles	BS ENI 097-2:1998	BS EN 12620:2002 LA40	2 per year
Acid soluble sulphate content	BS EN 1744-1:1998	Table 5 pd6682 & BS 8500-2, Table 2 AS1.0	2 per year
Total sulphur	BS EN 12620:2002	SHW Clause 801 <1% by mass	2 per year
Aggregate Composition	BS EN 932-1	Specification for Highway Works Table 8/3 & BS 8500-2, Table 2	1 per week

* Time periods relate to production periods not calendar periods

All testing will be undertaken by a UKAS approved laboratory. The Management will co-ordinate and arrange for sampling to be done on site. Should test results be unsatisfactory, then a NCR will be completed for root cause analysis. All test results will be filed by the Management. Unsatisfactory test results will result in increased testing frequencies until satisfactory results are once again obtained.

A weekly visual inspection will be performed to check grading, content of foreign material, contamination, segregation, and water content. If the product is non conforming then it will be removed for re-processing and an NCR will be completed.

Delivery documentation shall state that the product was produced under a quality protocol conforming to WRAP "The Quality Protocol".

Environmental Management System Document. (EMS document)

SECTION 7. Accidents

All Health & Safety matters are viewed with the utmost importance. In light of this the Risk Assessment for the Hughes & John Inert Recycling Yard emphasises the safe working practices, the responsibilities of the individual and the responsibilities of the Management.

The Accident Book is kept in the Management Office and is clearly identified and accessible to all staff for recording purposes.

To date there has been no serious accident to record and only very minor occurrences since the site has been operating from 2002.

All Emergency numbers and contacts are highlighted within the Office and the procedures in the event of a serious accident at the site or in connection with the business as a whole.

A review of the accident procedures and accident information is carried out after each accident and on an annual basis. The necessary updates to the records and procedures are made as a result of the review and advice is sought to prevent any possible occurrences in the future.

Environmental Management System Document. (EMS document)

SECTION 8. Incidents and Non Conformances

This Section deals with the incidents and non conformances as an operational tool that will identify and record such matters.

Any such incident which involves the incorrect application of plant machinery, equipment will be noted and discussed in the monthly review meetings and noted in the Non Conformances Report.

Please see attached Non-Conformance Report

All incidents and non conformances will be reported by email within 48 hours to National Resources Wales Officers and Planning Authority Officers who are required to be informed of the details of such occurrences. This will allow for clear lines of communications and ensuring that the standards that Hughes & John currently have are maintained and improved upon.

Environmental Management System Document. (EMS document)

SECTION 9. Closure

It is the intention for Hughes & John to continue with the Inert Recycling Centre for many years to come with a succession planning process in place that will cater for the ever higher standards that legislation requires facilities to comply with.

However as with all aspects of business there has to be a plan where the closure of the facility is detailed and carried out in the appropriate way with all aspects of Permit Regulation and Planning Conditions Controls are adhered to.

The EMS would draw attention to the bespoke permit requirements and planning conditions on permissions 08/0595/PA & 04/1096/PA attached in Section 13.

Further advice from all appropriate Authorities will be entered into as the EMS document evolves and adapts as a result of the consultations.

Environmental Management System Document. (EMS document)

SECTION 10. Complaints

Hughes & John take complaints about any part of the business set up, operation facility, standards of product produced or any aspect of the customer experience as a very priority.

The facility as a whole is run as efficiently as possible and the implementation of the procedures and protocol make the occurrences of any complaint very few and far between.

To that end the complaints procedures of the National Resources Wales & the Pembrokeshire Local Authority Planning & Environmental Health are a recorded method of dealing with any complaints in relation to activity on the site.

There is a procedure that Hughes & John adhere to that involves regular inspections from both NRW & Local Authority monitoring staff that if there is any form of complaint then they are made aware of all details so matters of fact are recorded and dealt with appropriately .

The procedures and details are reviewed at the monthly meetings and there is an annual review of the Complaints Section.

Environmental Management System Document. (EMS document)

SECTION 11. Staff Training & Competence

All staff and operatives will be inducted into this Environmental Management System, for the production of soil, soil substitutes and aggregates from inert construction waste.

Waste management operatives will receive appropriate training in Waste Management Operations.

The nominated management person will hold the necessary WAMITAB qualification for Inert Transfer/ Physical Treatment recycling and will receive training in Waste Management Operations.

All training will be carried out by Brightwater Training Coed Rhyal, Pembre, Carmarthenshire, SA16 0JS with a 5 day course designed to provide you with the required knowledge and prepare your portfolio, demonstrating competence to obtain the new WAMITAB 4 unit qualification for "LOW RISK" sites.

Please see separate booking confirmation details.

A series of Waste Management Toolbox talks will be developed and rolled out to all staff and operatives as a continued professional development (CPD) programme for the life span of the recycling facility.

These will include

- Washing down plant and machinery
- Spill control
- Segregation of waste

- Noise and vibration
- Material handling, transportation, storage and housekeeping
- Dust and air quality
- Pollution control
- Waste management
- And others, as identified by the Management to develop excellence in the **field** of recycling construction waste

Environmental Management System Document. (EMS document)

SECTION 12. Odour, Noise & Emissions Management Plan.

The Management Plan relating to the problems of Odour, Noise and Emissions revolves from the basic efficient and competent use of all plant, machinery and equipment.

The effective servicing of all equipment vehicles plant and machinery naturally contributes to the efficiency of an operation and therefore to the environmental quality of the operation.

All items plant, equipment, vehicles, machinery are calibrated and authorised either by Ministry Vehicle Testing Inspectors, Permit authorisation from Environmental Health Departments of Pembrokeshire County Council and contract servicing of qualified mechanics supplemented by in house servicing to the highest standards.

All such matters are reviewed at the monthly meetings and are reviewed on an annual basis with an assessment of the investment into new equipment and machinery where necessary.

Also in terms of a management plan detail planning conditions restrict the scale of activity to a tonnage limit of 25,00 tonnes per year, the construction of noise bunds, screening bunds for visual amenity plus noise level conditions for set areas coupled with a screening and activity of 20 days per year .

The above reduces the impact of any odour, noise and emissions on site so it can be classified as a "low risk "facility.

Environmental Management System Document. (EMS document)

SECTION 13. Documentation of Planning Permissions and other requirements

This Section of the EMS highlights the Planning Conditions set out under the planning permissions 08//595/PA & 04/1096/PA approved by Pembrokeshire County Council.

The approved plans for the planning permissions form the basis of the Site Operation Management Plan showing the extent of the operational areas, storage, noise and screening bund design, operational hours of control techniques used for noise and emissions reduction through use and location of plant and machinery.

The main overriding control refers to the 20 days of screening and crushing limits on site and is monitored on a weekly basis by the Minerals & Waste Monitoring Officer for Pembrokeshire/ Carmarthenshire Planning Department.

The permissions run in line with the Environmental Permit details in the extent of the area of the permit and reflect the conditions required by both Regulating Authorities.

The EMS also includes the reference to the Horizontal Guidance Note H6 and is included for reference purposes for specific details for the Hughes & John **EMS**.

Environmental Management System Document. (EMS document)

SECTION 14. Non Technical Summary

The Summary of the Hughes & John **EMS** is as follows:-

The EMS highlights a clear method of control of all environmental aspects of the operation of the Hughes & John Facility. It shows the identification of the Management responsibilities to ensuring the highest environmental standards for the treatment of waste to produce soil, soil substitutes and aggregates.

The methods applied in the efficient use of machinery, plant and equipment have a clear and direct effect in ensuring the environmental standards are achieved and maintained.

All documentation of environmental controls, meetings, reports, complaints, compliments customer feedback is accurately recorded and retained for inspection for at least 2 years.

There is a programme of onsite training for all staff plus the formal requirement of WAMITAB Operator Competence Certificate training is an indication of the commitment Hughes & John have set out in their programme for the **EMS** and Permit Application coupled with the Planning Permission Controls.

It is acknowledged that the **EMS** is a document that evolves and improves with direct advice from Officers of the National Resources Wales, Competence Training Organisations, and County Council Officers.

The **EMS** document has been produced "**In House**" at this stage in order to ensure that all staff and Management are aware of the required commitment to environmental standards set out by the regulatory control.

In conclusion any advice to improve, adjust and increase knowledge skills, training, competence and any aspect of environmental control will be taken on board and reflected in the working practices and review of all documentation at the Hughes & John Inert Recycling Facility.