Appendix 4- ISO14001 Certificate

# BMTRADA

## CERTIFICATE OF REGISTRATION

This is to certify that

**Raymond Brown Minerals and Recycling Limited (RBMRL)**
Lee Lane
Nursling
Southampton
SO16 QAD

has been audited and found to meet the requirements of standard
**ISO 14001:2004 Environmental Management System**

**Scope of certification**

Quarrying and landfill operations, construction aggregate processing, recycling and transportation. Waste treatment and recovery

**Certificate number:** 1754

Issue number: 2013-01

Certificate start date: 10 November 2013

Certificate expiry date: 9 November 2016

Date of initial certification: 10 November 2010

**Vic Bowen**
Chief Operating Officer
Certification UK

BM TRADA Certification Ltd, Chiltern House, Stocking Lane, High Wycombe, Buckinghamshire, HP14 4ND, UK

BM TRADA

## Appendix A

The network of participating sites shown below is included in the scope of certification shown on certificate number **(1754)**

| Branch | Address |
|---|---|
| Raymond Brown Minerals and Recycling Limited (RBMRL) | Hangar 14 Thruxton Industrial Estate<br>Andover<br>SP11 8PW |
| Raymond Brown Minerals and Recycling Limited (RBMRL) | Lee Lane<br>Nursling<br>Southampton<br>SO16 QAD |
| Raymond Brown Minerals and Recycling Limited (RBMRL) | Priors Court Road<br>Curridge<br>RG16 9DR |
| Raymond Brown Minerals and Recycling Limited (RBMRL) | Botley Road<br>Swanwick<br>Fareham<br>SO31 1BL |
| Raymond Brown Minerals and Recycling Limited (RBMRL) | Puddleton Road<br>Wareham<br>Dorset<br>BH20 6AX |
| Raymond Brown Minerals and Recycling Limited (RBMRL) | Whiterparish<br>Salisbury<br>SP5 2QE |
| Raymond Brown Minerals and Recycling Limited (RBMRL) | Verwood Road<br>Somerley<br>Ringwood<br>BH24 3QE |
| Raymond Brown Minerals and Recycling Limited (RBMRL) | A303 Recycling Facility<br>Drayton Road<br>Barton Stacey<br>SO21 3QQ |
| Raymond Brown Minerals and Recycling Limited (RBMRL) | Chilton Waste Transfer Site<br>Didcot<br>Oxford<br>OX11 0ST |

Appendix 5- Companies House Register - Directors



# Directors and Secretaries

| | | Date of birth | | |
|---|---|---|---|---|
| Stuart John HARRIS | Secretary | 10 December 1970 | Edit Stuart John HARRIS | Remove Stuart John HARRIS |
| Colin Edward BOLAM | Director | 11 December 1968 | Edit Colin Edward BOLAM | Remove Colin Edward BOLAM |
| Stephen Charles CLASBY | Director | 2 July 1965 | Edit Stephen Charles CLASBY | Remove Stephen Charles CLASBY |
| Steven Robert George COLE | Director | 17 June 1950 | Edit Steven Robert George COLE | Remove Steven Robert George COLE |
| Stuart John HARRIS | Director | 10 December 1970 | Edit Stuart John HARRIS | Remove Stuart John HARRIS |
| Mark John ISAAC | Director | 1 December 1970 | Edit Mark John ISAAC | Remove Mark John ISAAC |
| Ronald George ISAAC | Director | 19 April 1944 | Edit Ronald George ISAAC | Remove Ronald George ISAAC |
| Kelvin WHITE | Director | 3 September 1960 | Edit Kelvin WHITE | Remove Kelvin WHITE |

Back

Appendix 5b Companies House Register - S. Cole



# RAYMOND BROWN MINERALS & RECYCLING LTD

Company Number **03601649**

A Private Limited Company incorporated on **21 July 1998**

A-Z list of forms

Receive email reminders. Join eReminders email notifications

Safeguard your company details. Join PROOF to get protected by PROOF

Request email of current company information

Registered office address

160 Christchurch Road
Ringwood
Hampshire
BH24 3AR

Change address
Accounts up-to-date

Next accounts made up to

**31 March 2013** due by
**31 December 2013**

Last accounts made up to

**31 March 2012**

Change accounting reference date

Annual Return up-to-date

Next annual return made up to

**21 July 2013** due by
**18 August 2013**

Last annual return made up to

**21 July 2012**

| Directors and Secretaries | | Date of birth | | |
|---|---|---|---|---|
| Stuart John HARRIS | Secretary | 10 December 1970 | Edit Stuart John HARRIS | Remove Stuart John HARRIS |
| Colin Edward BOLAM | Director | 11 December 1968 | Edit Colin Edward BOLAM | Remove Colin Edward BOLAM |

| Directors and Secretaries | | Date of birth | | |
|---|---|---|---|---|
| Stephen Charles CLASBY | Director | 2 July 1965 | Edit Stephen Charles CLASBY | Remove Stephen Charles CLASBY |
| Steven Robert George COLE | Director | 17 June 1950 | Edit Steven Robert George COLE | Remove Steven Robert George COLE |
| Stuart John HARRIS | Director | 10 December 1970 | Edit Stuart John HARRIS | Remove Stuart John HARRIS |

Appoint a director Appoint a secretary View all directors and secretaries

Appendix 6 – Environment Agency Quick Guide on IBA Storage and Treatment

Environment Agency
Asiantaeth yr Amgylchedd

# Storing and treating incinerator bottom ash

Quick Guide 384_12 **Issued** 25/05/2012

**What is this guide about?**

This document provides a quick guide to the appropriate measures required at regulated facilities that are permitted for the storage and treatment of incinerator bottom ash (IBA).

**Who should use this guide?**

This quick guide has been produced to help permitting and compliance officers identify the key issues relevant to IBA storage and treatment processes to support their function in site permitting and compliance.

This is an internal guide. However, it may be shared externally where appropriate to help deliver a consistent regulatory approach.

**What is IBA?**

IBA is a relatively coarse ash produced from the incineration of municipal solid waste.

It is a heterogeneous material and, depending upon the waste burnt, is likely to contain varying quantities of glass, ceramics, brick, concrete and metals, in addition to clinker and ash.

The photo here shows a stockpile of untreated IBA material.

**What is the purpose of IBA treatment?**

The principal aim of Incinerator Bottom Ash treatment is to improve ash quality in order to generate a material that has the potential for recovery (e.g. for use as a secondary aggregate material in road construction) and mechanically separate and collect the ferrous and non-ferrous metal fractions for further recycling.

**What are the key issues covered by this guide?**

- IBA treatment processes
- Regulation & permitting of IBA activities
- Appropriate measures for:
  - waste acceptance
  - waste storage and handling
  - waste treatment

Document details

Related documents

Feedback

**Contact for queries**

**Waste Treatment**
Peter Chesney
7 22 2730

**Waste Incineration**
Dave Canham
7 28 2517

## Types of treatment processes

**Wet and dry processes**

Existing IBA treatment processes can generally be divided into two principal types:

- **Dry treatment** – Currently, this is the most common type of treatment and generally involves the following mechanical processes: size reduction and screening, and ferrous/non-ferrous metal separation (ferrous/non-ferrous).
- **Wet treatment** – This is likely to involve the following processes: size reduction, sieving, washing and ferrous/non-ferrous metal separation. The use of a wet treatment system can aid the removal of organics and fine particles from the IBA but will produce a wash-water that is likely to require subsequent treatment and disposal.

**Ash ageing processes**

Both wet and dry treatment systems can be preceded or proceeded by an ash ageing process, which utilises the pozzolanic (cement-like) properties of the ash and a range of chemical reactions (e.g. oxidation, carbonation, hydration, hydrolysis) to improve its physical and chemical properties (e.g. stabilising the material and reducing its leaching capacity).

The most common method used is 'natural ageing', during which the ash is stored in stockpiles open to the air (either outdoors or in covered buildings). The duration of the aging process varies between sites but typically takes between 6 – 12 weeks. Water can be sprayed on to the stockpiled material to aid the ageing process and to help prevent dust formation.

**Thermal processes**

It is also possible to treat IBA using thermal processes, which use very high temperatures (e.g. in the range of 1100 to 2000°C) to thermally treat (vitrify) the IBA. However, at the time of publication, such processes were not being employed at a commercial scale in England and Wales for the treatment of IBA and they are not covered further in this document.

**Example**

Illustration of a hypothetical IBA treatment process provides an example of a combination of both wet and dry treatment processes, with examples of the associated waste inputs and outputs.

## Regulating IBA treatment activities

**Environmental Permitting Regulations**

The treatment of IBA for the purpose of producing a substitute aggregate/construction material is likely to be classified as a R5 waste recovery operation, as defined under Annex II of the 2008 Waste Framework Directive[1].

These operations are permitted under the Environmental Permitting Regulations (EPR)[2] either as an activity that forms **part of a waste incineration installation** or as a **separate waste activity**, depending upon the location and purpose of the treatment process.

**Part of a waste incineration installation**

An activity carried out as part of a waste incineration installation permitted under Section 5.1, Schedule 1 of EPR (the EPR/Waste Incineration Directive[3] definition of incineration plant includes on-site facilities for treatment and storage of residues).

The IBA treatment process must be on the same site as the associated incinerator plant and only accept waste from this plant. If it does accept some waste from other plants that part of the operation will additionally be permitted as a separate waste activity.

**Separate waste activity[4]**

Separate waste activities are either permitted as **bespoke waste operations** or **waste installations**, depending upon the nature and quantity of the IBA material involved.

- **Bespoke waste operation**

  If treating non-hazardous waste IBA (19 01 12) for recovery (usually as an R5 operation), and/or treating hazardous waste IBA (19 01 11*) with a capacity <10t/day.

- **Waste installation**

  Permitted under Section 5.4A(1)(c)(iii), Schedule 1 of EPR if treating hazardous waste IBA (19 01 11*) for recovery (R5 activity) with a capacity >10t/day.

The treatment of IBA will be permitted as a bespoke waste operation or waste installation if:

- the treatment plant is not considered to be part of an incineration activity (i.e. if it is not on the same site as the incinerator that it serves), or
- it is located on the same site as an incinerator and treats IBA imported from another incinerator plant on a different site.

In the second instance, the treatment of IBA produced on-site would be permitted as part of the waste incineration activity and a bespoke waste operation or installation (as applicable) would be included in the permit for the treatment of the IBA imported from the off-site incinerator.

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[1] Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives.

[2] The Environmental Permitting (England and Wales) Regulations 2010, Statutory Instruments No.675

[3] See Article 3 of Directive 2000/76/EC on the incineration of waste

[4] This section is applicable to IBA treatment processes that are operated for the purpose of R5 waste recovery operations (i.e. where the IBA is treated in order to produce a substitute aggregate/construction material). Additional guidance should be sought in cases where this is not the case (e.g. if the IBA is treated for the purpose of disposal or for a different waste recovery operation, as defined under Annex II of the Directive on Waste).

**Permit requirements**

IBA treatment activities permitted under EPR as part of a waste incineration installation or as a waste installation are subject to the requirements of the IPPC Directive[5] and must demonstrate that they use Best Available Techniques (BAT) to prevent or reduce emissions and minimise their impact on the environment as a whole[6].

Waste operations are required to take necessary measures to protect human health and the environment.

Both are required to implement the Waste Hierarchy. We currently consider the measures set out in this document to be appropriate in respect of both requirements, along with other regime-specific requirements that may apply[7].

**Multiple operator installations**

Where the IBA treatment activity is part of the waste incineration installation and the waste incineration and IBA treatment activities are operated by different operators, the regulated facility will be permitted as a multiple operator installation. Each operator will be issued with a separate permit for the activity or activities that they undertake.

**Forward look to IED**

From 2013, we will start to implement the Industrial Emissions Directive[8] (IED) through the Environmental Permitting Regulations. Annex I of the IED includes the following listed activities for the treatment of non-hazardous slags and ashes:

- Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving one or more of the following activities: (iv) treatment of slags and ashes (currently a listed activity under Section 5.3 A(1)(c) of EPR).
- Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day involving one or more of the following activities: (iii) treatment of slags and ashes.

**Classification and use of processed IBA**

The Waste Protocols Project is currently considering whether an end of waste Quality Protocol can be developed for processed IBA (the output from the IBA treatment process). Until this decision is made, all processed IBA remains classified as a waste and its use is regulated under a Regulatory Position Statement[9].

Further information regarding the development of this protocol and the waste protocol project can be found here:

Environment Agency - Processed Incinerator bottom ash (processed IBA)

[5] Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control (IPPC)

[6] See Environment Agency Horizontal Guidance Document H1 Environmental risk assessment for permits

[7] EPR 1.00 How to comply with your Environmental Permit provides further guidance on the standards and measures that should be taken to prevent pollution; setting out those that apply to all permitted activities and those that are specific to waste operations and installations.

[8] Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control)

[9] The regulation of materials being considered for development of an end of waste Quality Protocol (http://www.environment-agency.gov.uk/static/documents/Business/MWRP_RPS_017_V13_Sepetmber_2011.pdf)

## Appropriate measures for waste acceptance

**Measures**

The appropriate measures include:

| Item | Measure |
|---|---|
| 1 | Operators should implement appropriate waste pre-acceptance & acceptance procedures for imported waste materials, having regard to the requirements for waste acceptance detailed in Section 1 and Section 2, Part 2 of EPR 1.00, as appropriate. |
| 2 | An acceptable range of waste types and characteristics should be established for treatment with clear criteria for waste rejection (e.g. for presence of unburnt/partially burnt material). |
| 3 | Waste should be checked upon arrival to confirm it is as described (i.e. type and quantity of waste as described on the waste transfer note), compliant with the site permit and suitable for the permitted treatment process. |
| 4 | Waste should only be accepted if adequate storage capacity is available on site. |

## Appropriate measures for IBA storage and handling

**Measures**

The appropriate measures include:

| Item | Measure |
|---|---|
| 1 | The total maximum storage capacity of the site and storage areas should be clearly stated in writing and effective stock management should ensure that the maximum storage capacities of the site and storage areas are not exceeded. |
| 2 | All waste storage and handling areas should be provided with an impermeable surface and sealed drainage and, where possible, located away from watercourses and sensitive perimeters/receptors. |
| 3 | Treated and untreated IBA and the different fractions of treated IBA material should be handled and stored separately to avoid cross-contamination (e.g. using separate contained storage vessels, bays or areas). |
| 4 | Uncovered or outdoor storage of material should be avoided where possible and practical to do so. Enclosed (but ventilated) or covered storage will help to prevent fugitive emissions (e.g. dust) and the generation of leachate and contaminated surface water, particularly from separated fine fractions. |
| 5 | Where very large quantities of IBA are involved (i.e. stockpiles of IBA held during the ageing process) open storage may be justified, which can allow for improved ash ventilation and handling. |
| 6 | Where open outdoor storage is used, one or a combination of the following measures should be employed:<br>▪ moistening the surface using water<br>▪ providing under-cover storage |

| Item | Measure |
|---|---|
| | The following measures should also be considered:<br>▪ implementing stockpile management techniques e.g. placing the longitudinal axis of the pile parallel with the prevailing wind, minimising its free surface area stockpile height, avoiding certain activities or implementing additional measures when there are extreme weather conditions (e.g. high winds);<br>▪ providing storage areas with retaining walls;<br>▪ providing protective shelter(e.g. using trees/shrubs, windbreak fences, netting screens or site topography) to reduce wind velocity and exposure. |
| 7 | Where possible and practical to do so, automated material handling systems (e.g. enclosed conveyors) should be employed in preference to manual handling methods or the use of mobile machinery (i.e. trucks, tractors, loading shovels etc). Where conveyors are used, drop heights should be minimised and material transfer points should be sheltered from the wind. |
| 8 | Where manual handling methods and mobile machinery are used, on-site storage areas should be designed to minimise material handling and measures should be taken to prevent fugitive emissions from material handling activities (e.g. tipping and loading) and vehicle movements. Examples of appropriate measures include regular cleaning and dampening of roadways and yard areas subject to vehicle movements, the use of dedicated tipping and loading bays/ areas provided with dust suppression systems, placing storage facilities close to processing areas and using closed or sheeted vehicles. |
| 9 | Where air extraction systems are used, for example on vessels and buildings, they should be provided with appropriate abatement equipment (e.g. fabric filters, cyclones or wet scrubbers). |
| 10 | The drainage infrastructure of the storage area(s) should be able to contain all possible contaminated run-off, including rainfall (if storage is outdoors) and fire water. |
| 11 | The application of water to waste materials and surfaces should be controlled in order to minimise the quantity of leachate and surface water that requires management. |
| 12 | Containers, tanks, lagoons and other vessels used to hold or store leachate, contaminated wash waters and other potential polluting substances should be impermeable and resistant to the stored materials and provided with appropriate measures to prevent fugitive releases to land and water[10]. |
| 13 | Procedures should be in place for the regular inspection and maintenance of storage areas and associated infrastructure, including site surfacing, drainage systems and containment measures. Inspections should pay particular attention to signs of damage, deterioration and leakage. Records should be kept detailing action taken. Faults must be repaired as soon as practicable. |

[10]See Section 3, Part 1 of EPR1.00 How to Comply and Section 2.2.5 of the S5.06 Sector Guidance Note (where applicable) for further guidance regarding appropriate measures for the prevention of fugitive emissions (emissions of substances not controlled by emission limits) to surface water, sewer and groundwater.

## Appropriate measures for IBA treatment

**Measures** The appropriate measures include:

| Item | Measure |
|---|---|
| 1 | The treatment process should demonstrate effective techniques for separating and recovering metals and organics (i.e. unburnt material) and reducing the leachability of the treated material, whilst preventing and reducing emissions and other risks to the environment. Applications for new regulated facilities and plant upgrades should demonstrate this through an assessment of candidate treatment options following the Environment Agency's H1 Environmental Risk Assessment framework[11]. |
| 2 | The treatment processes employed (e.g. metal separation, ash ageing/carbonation) should be defined with clear treatment objectives (i.e. a defined end point) and reaction chemistry, as appropriate. |
| 3 | Procedures should be in place for sampling and testing the processed IBA to assess and confirm the end of the treatment process (i.e. achievement of established treatment objectives – see Point 2), ensuring quality control and managing any non-conformance (e.g. reprocessing and re-testing). Relevant test parameters will depend upon end-use specifications. |
| 4 | As a minimum, all ash treatment processes should be carried out on an impermeable surface provided with sealed drainage, appropriate measures for the collection and containment of wash waters, leachate and other potentially contaminated waters and measures to prevent and minimise fugitive emissions. |
| 5 | Treating material inside a covered building can help to prevent fugitive emissions (e.g. dust, odour, noise) and improve leachate control. The use of enclosed or covered equipment (e.g. enclosed process plant, chutes, and conveyors) should also be considered for preventing fugitive emissions, particularly for mechanical/physical treatment activities (e.g. crushing and screening) that are operated outdoors. |
| 6 | Measures should be considered for improving air and water circulation during the IBA ageing process, which can help increase the quality of the processed IBA and reduce treatment/storage duration by increasing the rate of chemical reactions (e.g. carbonation, oxidation, hydration & hydrolysis), improving material drainage and increasing material homogeneity. |
| 7 | Dilution of contaminants/dangerous substances (e.g. metals, salts etc) is not an acceptable treatment process in itself. Accepted waste materials that contain contaminants/dangerous substances at concentrations above the hazardous waste thresholds may only be mixed (either during storage or treatment) with other categories of hazardous waste or with other waste, substances or materials if it is specifically authorised by the facility's environmental permit, the materials are known to be chemically compatible and it can be proven that contaminants/dangerous substances in the waste will be treated by the ash treatment process (e.g. removed or immobilised) and not by physical dilution. |

[11] Advanced methods of IBA treatment (e.g. accelerated carbonation, wet physical separation) are now being developed and tested that aim to maximise metal recovery and optimise the ash ageing process and applications for new facilities and plant upgrades should consider these as part of their assessment of candidate options, taking into account their technical/economic viability.

| Item | Measure |
|---|---|
| 8 | Hydrogen gas is released from IBA during the ageing process (as aluminium reacts with calcium hydroxide and water to form aluminium hydroxide). Areas of the site where flammable or explosive atmospheres may accumulate should be assessed in accordance with the Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR) and appropriate precautions taken to minimise the risk of fire or explosion (e.g. if the ash ageing process is carried out in a building or under cover, adequate ventilation should be provided to ensure that any gas can be dispersed safely). For further guidance on DSEAR and hazardous area classification see the HSE's DSEAR Approved code of practice and guidance (L138). |
| 9 | Measures should be implemented to prevent and minimise the production and disposal of waste waters and other waste residues. For example, it may be possible to use rain water and clean surface water collected on-site to dampen stockpiles of IBA and roadways, replacing or reducing the use of mains water. |
| 10 | Each waste stream arising from the regulated facility should be comprehensively characterised, quantified, classified and consigned in accordance with the requirements of the Duty of Care and Hazardous Waste Regulations, as appropriate. |
| 11 | Waste waters generated on-site (e.g. leachate, wash-waters and surface water) will require compositional assessment before they are discharged to sewer (subject to a consent issued by the local water company), surface water (i.e. as a permitted discharge) or tankered off-site for disposal or recovery. It may be necessary to treat effluent on-site before disposal/discharge[12]. Further guidance on effluent treatment is provided in Sector Guidance Note S5.06 (see Section 2.2.2). |

[12]Waste waters from IBA facilities are sometimes held in settlement tanks/lagoons in order to remove suspended solids prior to discharge. The following webpage provides some general advice on their design and use: http://www.environment-agency.gov.uk/netregs/businesses/construction/62337.aspx

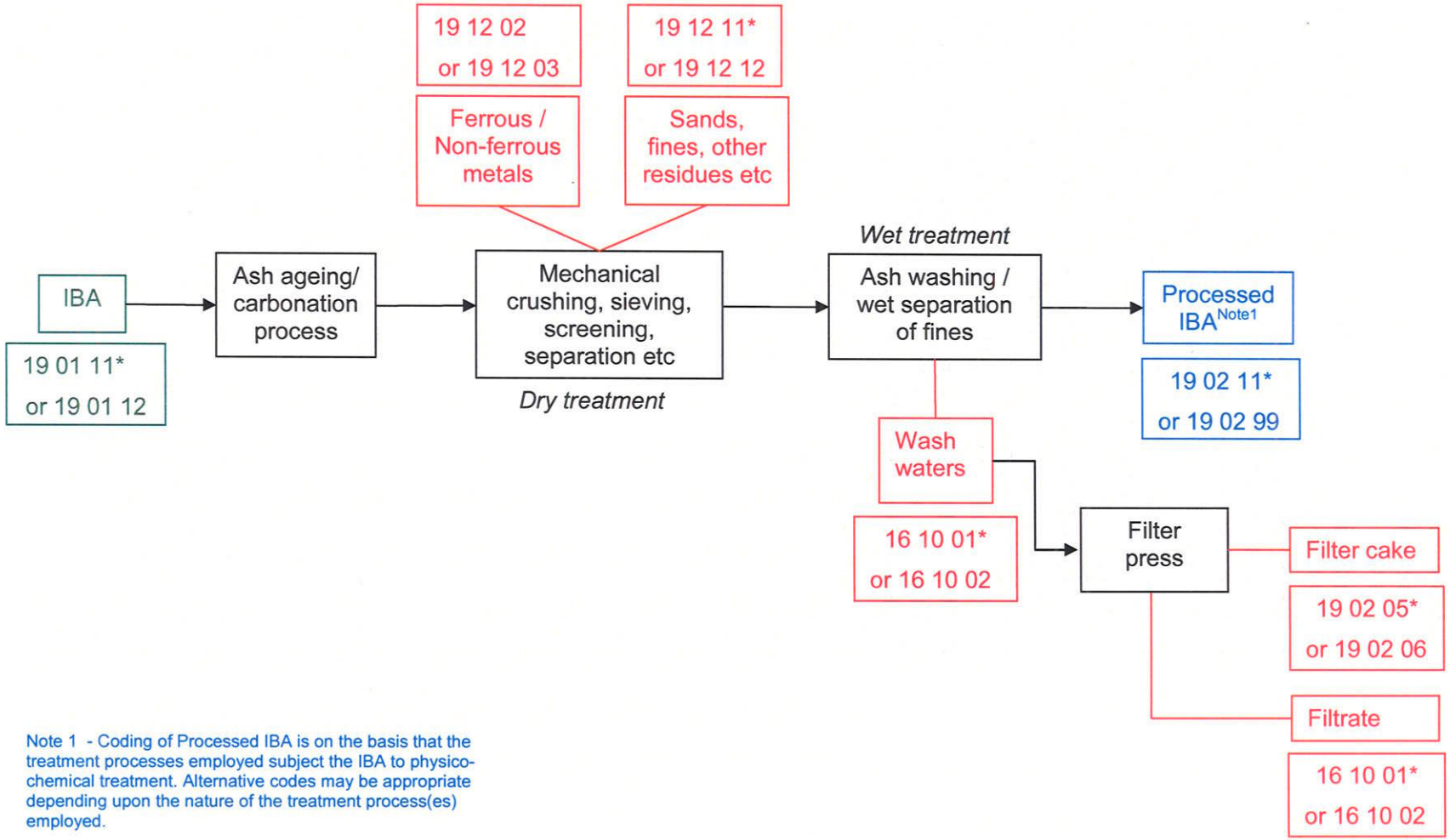
## Related documents

**Links**

- Integrated Pollution Prevention and Control, Reference document on best available techniques for waste treatment industries, European Commission, August 2006
- EPR1.00 How to comply with your environmental permit, Environment Agency
- Horizontal Guidance Note H1, Environmental Risk Assessment for Permits, Environment Agency
- S5.06 IPPC Sector Guidance Note, Guidance for the Recovery and Disposal of Hazardous and Non Hazardous Waste, Environment Agency
- EPR 5.01 How to comply with your Environmental Permit, Additional guidance for the incineration of waste, Environment Agency
- Integrated Pollution Prevention and Control, Reference document on best available techniques for waste incineration, European Commission, August 2006
- Integrated Pollution Prevention and Control, Reference document on best available techniques for storage
- L138 HSE Approved code of practice. Dangerous Substances and Explosive Atmospheres. HSE Books (ISBN 0717622037)
- Minerals Policy Statement 2: Controlling and mitigating the environmental effects of minerals extraction in England, Annex 1: Dust. Office of the Deputy Prime Minister, March 2005

## Illustration of a hypothetical IBA treatment process

This hypothetical IBA treatment activity combines dry and wet treatment processes and provides examples of the resulting waste outputs and European Waste Catalogue codes




Note 1 - Coding of Processed IBA is on the basis that the treatment processes employed subject the IBA to physico-chemical treatment. Alternative codes may be appropriate depending upon the nature of the treatment process(es) employed.