

Health, Safety & Environment Department

## Incinerator Bottom Ash Aggregate (Storage & Use) Guidance

The Environment Agency (England) has strict rules outlining when IBAA can be used on construction projects. Furthermore, it outlines in which scenarios it can be used and the volumes permitted.

The below guidance applies if using unbound municipal incinerator bottom ash aggregate (IBAA). It also covers storage of IBAA in relation to its use,

Unbound IBAA includes IBAA in hydraulically-bound mixtures (HBMs). A HBM is where IBAA is mixed with water and a binder such as cement to form a mixture which then sets.



The use of IBAA must not endanger human health or the environment. It is a legal requirement to follow the rules set out below when using IBAA on construction sites.

#### Risks

Using IBAA may produce **hydrogen** so you must take appropriate safeguards.

You must:

- follow the hydrogen safeguarding guidance in the Material Safety Data Sheets
- comply with the guidance Dispose of business or commercial waste
- comply with <u>hazardous waste controls</u> if you identify these wastes
- store unbound IBAA safely and securely
- follow the <u>Health and Safety Executive precautions</u> on the use of IBAA or other equivalent measures
- keep records for 2 years that show you have complied with this RPS you must make these records available to the Environment Agency on request

#### **Deliveries**

For each delivery the producer must confirm (by doing risk assessments) that the supply



meets all the conditions in this RPS and record in writing the:

date of supply

• name and contact details of the producer and distributors (as applicable), including the site of production's address

• quantity supplied (by weight or volume)

• statement from the producer that the material meets the relevant standard for an end use specified in this RPS and has been supplied for that use

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We must obtain a copy of this record (as the end user of the unbound IBAA). Both parties must:

- keep the record for a minimum of 2 years
- make each record available to the Environment Agency on request

You must not store or use unbound IBAA within:

- a groundwater source protection zone 1 or 2
- 50 metres of any spring or well, or any borehole used to supply water, including private water supplies

You must make sure your activity does not endanger human health or the environment. You must not:

- use, or supply for use, IBAA underneath any residential building or garden
- store IBAA for more than 6 months before use
- cause a risk to water, air, soil, plants or animals
- cause a nuisance through noise or odour
- adversely affect the countryside or places of special interest

All aggregate products must comply with <u>BS EN 13242</u> or any revision of that standard.

### Building a road sub-base

You can use an unlimited quantity of unbound IBAA to build a road sub-base providing:

- the width of the IBAA emplacement is not more than 40 metres
- the road, cycleway or footpath is asphalt, concrete or other low permeable material

### Building a construction or structural platform

You can use IBAA to build a construction or structural platform that is on average one metre thick. It must be at least 25 metres from a surface water body. At least 95% of it must be entirely covered by a low permeability surface or building.

The amount of IBAA you can use depends on the distance to a surface water body as shown in the following table.

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Distance to water body (metres)	Maximum tonnage (tonnes) (Dry	Volume after compaction assuming 1.7T/m3 (m3)	Maximum surface area of a structural platform (m2)
25-49	4,420	2,600	2,600
50-99	6,800	4,000	4,000
100-149	13,600	8,000	8,000
150-199	20,400	12,000	12,000
200-249	27,200	16,000	16,000
250-299	34,000	20,000	20,000
300-349	40,800	24,000	24,000
350-399	47,600	28,000	28,000
400-449	54,400	32,000	32,000
450-499	61,200	36,000	36,000
More than 500	68,000	40,000	40,000

# Pipe bedding

You can use up to 510 tonnes of unbound IBAA as pipe bedding in any single construction project. This does not apply to anything that has been artificially divided.

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