Humber river basin district: climate change risk assessment worksheet

Name: Humberside Blocks (2012) Ltd

Our permit reference number (if you have one):N/A

Your document reference number: HB/CSRA/01 January 2021

Risk assessment worksheet for the 2050s

Humber river basin district

You must carry out a climate change risk assessment for any new bespoke waste and installations permit applications if you expect to operate for more than 5 years. Use the user guide to complete the table. You can add in extra pages if necessary.

Consider how your operations will be affected by the changes in weather and climate described in the table. Consider any changes to average climate conditions that may impact on your operations, for example extreme rainfall.

Also consider:

- critical thresholds - where a 'tipping point' is reached, for example a specific temperature where site processes cannot operate safely
- changes to averages - for example an entire summer of higher than expected rainfall causing waterlogging
- where hazards may combine to cause more impacts

You can add in other climate variables if you wish.

If you have stated on your application form that you do not expect to be operational in 2050, you must still consider climate change risks for the time you do intend to operate. Whilst the variables are for the 2050s, this is an estimated date and you may experience these conditions before then.

This worksheet will sit in your management system. It must appear on the management system summary you submit with your application, even if you do not need to submit the whole risk assessment with your application.

If your pre-mitigation risk score (column D) is 5 or higher, you must complete columns E to H.

Potential changing climate variable	**A Impact**	**B Likelihood**	**C Severity**	**D Risk** (B x C)	**E Mitigation** (what will you do to mitigate this risk)	**F Likelihood** (after mitigation)	**G Severity** (after mitigation)	**H Residual risk** (F x G)
1. Summer daily maximum temperature may be around 6°C higher compared to average summer temperatures now.	Site dries out quicker leading to dust generation	3	2	6	Increase water storage capacity Ensure ability to extract water from adjacent drains	3	1	3
2. Winter daily maximum temperature could be 4°C more than the current average.	No negative impact expected	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3. The biggest rainfall events are up to 20% more intense than current extremes (peak rainfall intensity)*.	Wash out of stored material	2	2	4				

Potential changing climate variable	A Impact	B Likelihood	C Severity	D Risk (B x C)	E Mitigation (what will you do to mitigate this risk)	F Likelihood (after mitigation)	G Severity (after mitigation)	H Residual risk (F x G)
4. Average winter rainfall may increase by 29% on today's averages.	Greater potential for mud to be tracked off site	3	2	6	Increased presence of road sweeper and vigilance of site staff	3	1	3
5. Sea level could be as much as 0.6m higher compared to today's level *.	Potential for flooding. Burstwick Drain is tidal	2	3	6	Increase heights of bunds along Burstwick Drain side of the site	1	3	3
6. Drier summers, potentially up to 34% less rain than now.	Potential increase in dust generation	3	2	6	Increase water storage capacity Ensure ability to extract water from adjacent drains	3	1	3
7. At its peak, the flow in watercourses could be 30% more than now, and at its lowest it could be 65% less than now.	Potential for flooding	2	3	6	Increase heights of bunds surrounding the site	1	3	3

*Indicates data has come from climate change allowances as part of the spatial planning process. Evidence from your planning submission is acceptable evidence for this worksheet.

WASTE TYPES

Humberside Blocks (2012) Ltd

Ellifoot Lane

Burstwick

Hull

HU12 9EF

Ref: HB/LOW/01 January 2021

01 WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS

01 04 wastes from physical and chemical processing of non-metalliferous minerals
01 04 08 waste gravel and crushed rocks other than those mentioned in 01 04 07
01 04 09 waste sand and clays

02 WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING

02 02 waste from preparation and processing of meat, fish and other foods of animal origin
02 02 02 shellfish shells from which the soft tissue or flesh has been removed only

03 WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD

03 01 wastes from wood processing and the production of panels and furniture
03 01 01 waste bark and cork
03 03 wastes from pulp, paper and cardboard production and processing
03 03 01 waste bark and wood

10 WASTES FROM THERMAL PROCESSES

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 11 12 clean glass other than those mentioned in 10 11 11
10 12 wastes from manufacture of ceramic goods, bricks, tiles 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 products made from them
10 13 14 waste concrete only

15 WASTE PACKAGING

15 01 packaging
15 01 07 clean glass only

17 CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)

17 01 concrete, bricks, tiles and ceramics

17 01 01 concrete
17 01 02 bricks
17 01 03 tiles and ceramics
17 01 07 mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 02 wood, glass and plastic
17 02 02 clean glass only
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 05 04 soil and stones other than those mentioned in 17 05 03
17 05 06 dredging spoil other than those mentioned in 17 05 05
17 05 08 track ballast other than those mentioned in 17 05 07
17 08 gypsum based construction material
17 08 02 gypsum only other than that mentioned in 17 08 01

19 WASTES FROM WASTE MANAGEMENT FACILITIES, OFF SITE WASTE WATER TREATMENT PLANTS AND PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION / INDUSTRIAL WASTE

19 05 wastes from aerobic treatment of solid waste
19 05 03 compost from source segregated biodegradable waste only
19 08 wastes from waste water treatment plants not otherwise specified
19 08 02 washed sewage grit (waste from desanding) 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 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS

20 01 separately collected fractions
20 01 02 clean glass only
20 02 garden and park wastes
20 02 02 soil and stones

SITE CONDITION / BASELINE REPORT

Humberside Blocks (2012) Ltd

Ellifoot Lane

Burstwick

Hull

HU12 9EF

Document Reference No. HB/SCR/0820

SJW Enviro Consulting Ltd

CONTENTS:

1. Site Details

Name of the applicant	Humberside Blocks (2012) Ltd
Activity address	Ellifoot Lane Burstwick Hull HU12 9EF
National grid reference	TA 22920 28701
Document reference	Reference No. HB/SCR/0720 for site condition report at permit application.
Site plans	This report is to be read in conjunction with drawing numbers HB/EMS/01, HB/EMS/02, HB/EMS/03 and HB/EMS/04 attached to the Environment Management System Version 1.0, January 2021 for the site at Appendix 1.

2. Condition of the land at permit issue

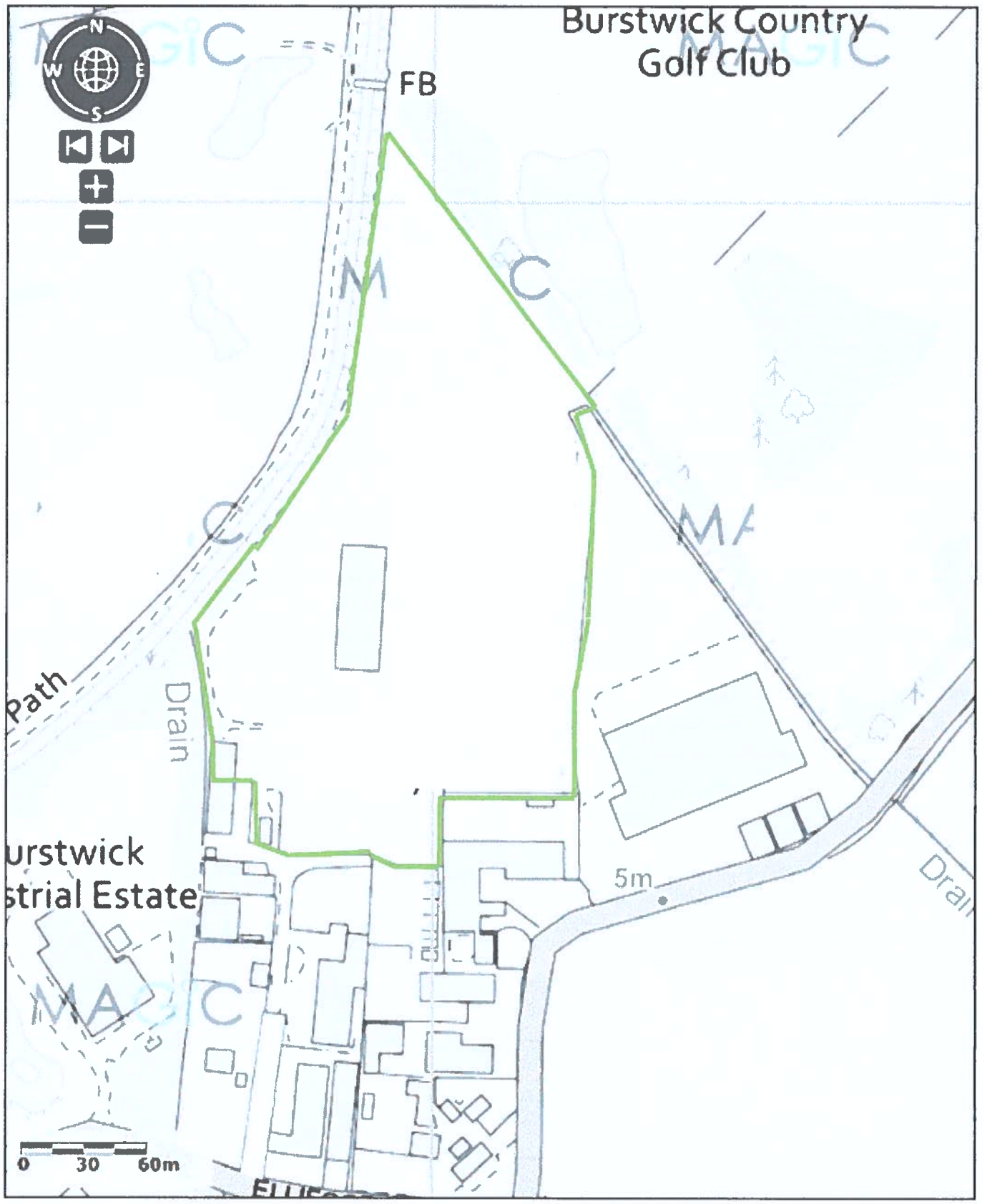
Geology	The superficial geology underlying the site is a mixture of clay, silt, sand and gravel alluvium, Devensian Diamicton till and Devensian sand and gravel glaciofluvial deposits. The bedrock geology is the Flamborough chalk formation.
Hydrogeology	The Environment Agency groundwater vulnerability map classifies the area under the site as having a medium vulnerability. There are no wells, springs or boreholes within 50 metres of the site boundary used for the supply of water for human consumption. The nearest borehole is over 400 metres to the west of the site on the adjacent golf course. The assumption is that the borehole is used for irrigation. The site is located in a surface water Nitrate Vulnerable Zone.
Surface waters	Two surface water drains run along boundary of the site. Burstwick Drain runs along the north western edge while East Carr Drains runs along the north eastern edge of the site and is fed from a pond on the adjacent

	golf course. There is also a small un-named drain to the west of the site which runs into Burstwick Drain.
Pollution history	There are no records of pollution occurring on this site which was used as agricultural land up until the 1950's. Since then the land has been developed as an industrial estate and block making has been taking place on the site since the 1980's. As a result, there may be some contamination of the underlying ground and the permit holders accept this.
Historic contamination	As above
Baseline data	No baseline data for the site exists. It has been in use as a block manufacturer for some time. As a result contamination of the site surface may be present. The site operators acknowledge that contamination is a possibility and accept liability for remediation of the site should they wish to surrender the permit at some point in the future.

3. Permitted activities

Permitted activities	The site is to be permitted as a waste treatment facility.
Non-permitted activities	All the activities at the site will be covered by the permit.
Plans	This report is to be read in conjunction with drawing numbers HB/EMS/01, HB/EMS/02, HB/EMS/03 and HB/EMS/04 attached to the Environment Management System Version 1.0, January 2021 for the site at Appendix 1. The area to which is report relates is shown edged green on the attached plan HB/SCR/0920/01

Plan No. HB/SCR/0920/01 – Permit boundary plan



ENVIRONMENTAL RISK ASSESSMENT

Humberside Blocks (2012) Ltd

Ellifoot Lane

Burstwick

Hull

HU12 9EF

HB/ERA/01 January 2021

SJW Enviro Consulting Ltd

CONTENTS:

1. Introduction

1.1 This Environmental Risk Assessment considers the potential and actual risks associated with the use of the waste treatment facility at Humberside Blocks (2012) Ltd, Ellifoot Lane, Burstwick, Hull, HU12 9EF.

1.2 The site will be operated by Humberside Blocks (2012) Ltd in accordance with a fully comprehensive Environment Management System (EMS) and a Tier 3 bespoke environmental permit regulated by the Environment Agency (EA).

1.3 All site staff will be made aware of the contents of this risk assessment and where it is located on site.

1.4 All environmental risks identified in this document will be acted upon accordingly by site management to ensure all risks can be appropriately managed and controlled.

1.5 This document primarily considers environmental risks associated with the site. This does not aim to provide detailed health and safety risk assessments as required separately through the necessary regulation.

1.6 Specified waste management operations include waste disposal and waste recovery operations listed in Annex IIA and IIB of the Waste Framework Directive 2008/98/EC and are listed in summary below:

D15: Storage of waste pending disposal

R4: Recycling or reclamation of metals

R5: Recycling or reclamation of other inorganic materials

R13: Storage of waste pending recovery

2. Environmental Risk Assessment Model

2.1 Fundamental Considerations

2.1.1 Source/Hazard: A property or situation that in particular circumstances could lead to harm

2.1.2 Consequences: The adverse effects or harm as a result of realising a hazard which causes the quality of human health or the environment to be impaired in the short or long term.

2.1.3 Risk: A combination of the probability of occurrence of a defined hazard and the magnitude of the consequences of the occurrence.

2.2 Pathway

2.2.1 Important in the assessment of a particular risk and to inform the subsequent management of the risk is the identification of a pathway through which the risk may affect the identified receptor. The following are examples of pathways:

- Air

- Ground
- Water
- Direct contact / exposure

2.3 Consequences

2.3.1 The following table highlights the consequences of the hazards identified and the abbreviations for each as used in the Risk Assessment Table in Section 3

Abbreviation	Consequences
A	Minor Injury
B	Major Injury
C	Death
D	Air Pollution
E	Water Pollution
F	Pollution of Land

2.4 Effects of Consequences

2.4.1 In order to quantify the level of risk and identify the appropriate management procedures, the potential effects must be considered, as outlined in the table below:

Abbreviation	Effect of Consequences	Management Required ?
S	Severe	In all cases
Mo	Moderate	In most cases
Mi	Mild	Occasionally
N	Negligible	No

2.4.2 Note 'Management' is the action required to reduce the risk of a hazard causing a problem on site. Contingency measures are procedures which are in place to reduce the consequences of a hazard.

2.5 Risk Estimation and Evaluation

2.5.1 The following table allows the likelihood of an occurrence of an identified risk to be assessed:

	Probability	Evaluation
1	Very likely	Could occur during any working day
2	Likely	Could occur regularly
3	Possible	Event possible
4	Unlikely	Event very unlikely

2.6 Risk Assessment Outcome

2.6.1 The following table shows the resultant risk of an identified hazard or potential situation. This uses the hierarchy of both probability and consequence to assess the

level of risk. The level of risk determines what level of management would be required in order to reduce the risk of occurrence and/or scale.

	S	Mo	Mi	N
1	High	High	Medium	Low
2	High	Medium	Low	Near Zero
3	Medium	Low	Near Zero	N/A
4	Low	Near Zero	N/A	N/A

2.6.2 Where the risk assessment outcome is high, first-level management of the risk is essential, i.e. the removal of hazard, implementation of major infrastructure/structural design measures to contain the hazard and risk and company policy changes to incorporate the management of the risk. All risk management measures must be supplemented with detailed induction training, spot training and tool-box talks t ensure all site staff and users are made fully aware of the risk and hazard, all potential consequences and necessary management and contingency procedures.

2.6.3 Where the risk outcome is medium, the management of the risk should be tackled by management and delegates. If removal of the hazard is not possible, management will normally be met through implementing minor structural design measures or by imposing procedures for the prevention of occurrences which will be conveyed to all site staff through the appropriate training, including any contingency measures and procedures.

2.6.4 Where the risk assessment outcome is low, the management of the risk can be done wholly through appropriate training to site staff including any contingency measures and procedures.

2.6.5 Where the risk assessment outcome is near-zero, site staff should be made aware of the possibility of an occurrence and contingency measures should be readily available to all staff should they be required.

3. Risk Assessment Table

4.1 The following pages contain the site-specific risk assessment for the site with the appropriate remedial actions, recommendations and comments included for each identified hazard, potential contaminant or situation.

4.2 All situations which identify a risk from Low to High will be incorporated into the staff and visitor training and induction schedules where appropriate and acted upon as required.

Hazard/Potential Contaminant or situation	Sources	Pathway	Receptors	Consequences	Effect	Probability	Assessment outcome	Remedial action and recommendations
Dust and particulates	Site surfaces Waste storage Vehicle movements Loading and unloading	Air	Site staff and visitor Industrial premises Elliffot Lane Golf Course users Burstwick and East Carr Drains	A, B, D, E, F	Mo	2	Med	Damp site surfaces using bowser Damping down waste piles Deployment of road sweeper on access roads Sheeting of loads arriving at and leaving site Minimise drop height when loading and unloading
Odour	Stored biodegradable waste	Air	Site staff and visitors Industrial Premises Golf Course users	A, D	Mi to Mo	3	Low to Near-Zero	Rapid turn-around of potentially odour causing material Strict waste acceptance procedures Daily monitoring and staff vigilance
Litter	Pre-processing stockpile Un-sheeted or poorly sheeted vehicles Poor housekeeping	Air	Burstwick and East Carr Drains Ellifoot Lane Golf Course Users Industrial Premises	A, B, C, E, F	Mi to Mo	3	Low to Near-Zero	Secure sheeting of vehicles arriving at and leaving site Daily checks on site by management Good housekeeping

Noise or vibration	Plant and machinery Loading and unloading	Air	Site staff and visitors Industrial Premises Members of the public Golf Course users	A, D	Mo	3	Low	Minimise drop heights when loading and unloading Effective plant maintenance programme
Vermin	Stored waste	Water Direct contact with waste	Site staff and visitors Golf Course users Members of the public Industrial premises	A, B, C	Mi to Mo	3	Low	Wear appropriate PPE on site Daily check of site for evidence of vermin Provision of bait boxes and traps as required Rapid turn-around of non-inert waste Good housekeeping
Fire, smoke and particulates	Plant exhausts Storage of waste Combustion of waste	Air Direct contact	Site staff and visitors Industrial premises Public Burstwick and East Carr Drains Ellifoot Lane	A, B, C, D, E, F	Mi to S	3	Med	Fire Prevention Plan No fires on site Rapid turn-around of waste No smoking on site Programme of plant maintenance Vigilance of site staff
Vehicle collision or accident	Mud on site access roads Poor visibility	Direct contact	Vehicle users Pedestrians	A, B, C, D, E, F	Mi to S	3	Low	Plant maintenance programme Good housekeeping

								Keeping access roads mud free
Leachate	Stored waste	Ground	Burstwick and East Carr Drains Groundwater	E, F	Mi to S	3	Low	Rapid turn-around of waste Good housekeeping Clean up spillages when occur
Impact / Injury	Collapse of stored material Falling materials Loading and unloading	Direct contact	Site staff and visitors	A, B, C	Mi to S	3	Low	Storage heights kept to a minimum Drop heights kept to a minimum Appropriate PPE issued to site staff and its wearing enforced by management Staff training
Hydrocarbons	Fuel tanks Drips when re-fuelling Plant failure Delivery to site	Ground Water Direct contact by ingestion or inhalation	Site staff and visitors Groundwater Burstwick and East Carr Drains	A, B, D, E, F	Mi to S	3	Low	Bunding of fuel tanks and drums Appropriate PPE issued to staff Staff training Availability of spill kits Preventative maintenance programme for plant and equipment
Releases of gases, fumes or vapours	Overturned vehicle or plant Reaction between stored wastes Unauthorised items in waste loads	Air Ground Water	Site staff and visitor Members of the public Ellifoot Lane Golf Course users	A, B, C, D, E, F	Mi to S	3	Low	Waste acceptance procedures in place Quarantine area for non-permitted wastes Preventative plant maintenance programme

			Industrial premises					Staff training and vigilance

ENVIRONMENT MANAGEMENT SYSTEM

Humberside Blocks (2012) Ltd

Ellifoot Lane

Burstwick

Hull

HU12 9EF

Version 1.0 January 2021

SJW Enviro Consulting Ltd

CONTENTS:

Appendices:

Appendix 1 – Drawings

1.0 GENERAL CONSIDERATIONS

1.1 Site operator / permit holder

1.1.1 The site which is the subject of this environmental management system (EMS) is operated by Humberside Blocks Ltd.

1.1.2 This EMS relates to the whole of the site area under the ownership of the permit holder as shown edged green in the attached drawing HB/EMS/02 attached to this document in Appendix 1. Any reference to 'the site' in this document relates to this area.

1.1.3 The site is approximately 42,000 square metres in size. Concrete blocks have been made on this site since at least 1986.

1.1.4 This EMS will form part of the Environmental Permit for this site. It is also to be used to give instructions to staff specifying how the site shall be managed and operated.

1.1.5 The site is situated at the following address:

Ellifoot Lane
Burstwick
Hull
North Yorkshire
HU12 9EF

Contact: David Beaumont
Tel: 01924 456416

1.1.6 SJW Enviro Consulting Ltd has been employed as consultants for Humberside Blocks Ltd to produce the EMS for this facility. Contact details are as follows:

Address: SJW Enviro Consulting Ltd
8 Meadow Bank
Holmfirth
West Yorkshire
HD9 1QS

Tel: 07471 910102

Contact: Simon Walker E-mail: simon@sjwenviroconsulting.co.uk

1.2 Company environmental policy

1.2.1 Humberside Blocks (2012) Ltd is committed to achieving high performance across the whole range of its activities. Compliance with all relevant environmental legislation is a core requirement of this policy.

1.2.2 The company will pursue continual improvement in performance and management, with the objective of protecting and enhancing the environment and preventing pollution.

1.2.3 Company policies and procedures will be subject to frequent review and all staff at all levels will receive compliance training, updated at regular intervals.

1.2.4 The company will actively promote waste recycling and recovery, seeking to extend the range of material recycled with the objective of replacing the use of non-sustainable natural resources where possible.

1.2.5 Environmental performance will be given equal priority with all other business objectives and all staff will be made aware of the adherence to this Environmental Policy is the responsibility of all employees.

1.3 Permit area

1.3.1 The site is located off Ellifoot Lane approximately 550 metres to the north of the village of Burstwick and 15.5 kilometres east of the city of Hull. The site entrance is located off an unpaved road off Ellifoot Lane as shown on plan No. HB/EMS/03, served at OS map reference TA 22920 28701. The immediate surrounding areas are comprised of industrial units, and a golf course.

1.3.2 The area which is subject to this application is outlined in green on drawing no. HB/EMS/02.

1.4 Hydrology and Hydrogeology

1.4.1 Flood maps indicate that the site is mainly within Flood Zone 3 while a small area around the site office is in Flood Zone 2. Flood Zone 3 indicates a higher risk of flooding. The area does not benefit from flood defences or a flood water storage area.

1.4.2 The Environment Agency groundwater vulnerability map classifies the area under the site as having a medium vulnerability.

1.4.4 There are no wells, springs or boreholes within 50 metres of the site boundary used for the supply of water for human consumption. The nearest borehole is over 400 metres to the west of the site on the adjacent golf course. The assumption is that the borehole is used for irrigation.

1.4.5 The site is located within a surface water Nitrate Vulnerable Zone. No nitrate is produced or used on the site.

1.5 Waste management operations

1.5.1 This EMS accompanies an application for a bespoke permit to allow the processing of up to 9000 tonnes of mixed waste that was delivered to the site in 2014. The material was delivered as glass cullet for crushing and use in the block making process but, in reality, contained contaminants in the form of plastic, rubber and metal.

1.5.2 On the completion of the processing of material already on site the permit will legitimise the processing of other waste streams that can be incorporated into the block making process.

1.5.2 Waste processes carried out on this site include the following:

Specified waste management operations include waste recovery operations listed in Parts II and III of Schedule 4 of the Environmental Permitting Regulations (England and Wales) 2010. They are listed in summary below:

R4 Recycling/reclamation of metals

R5 Recycling/reclamation of other inorganic materials

R13 Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)

D15 Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where it is produced)

1.6 Hours of operation

1.6.1 Site operations will only take place during the hours agreed with the Local Planning Authority.

Waste Delivery and Process Activities:

Monday to Friday 0800 – 1600 hrs

No operations will take place on Saturdays, Sundays or Bank Holidays or outside the above hours without written agreement from the Local Planning Authority and the Environment Agency.

1.6.2 Floodlights are available for use if permitted operations or emergency procedures are carried out after official lighting up times. Mobile floodlights will be made available if additional lighting is required.

1.7 Waste types and quantities

1.7.1 There is currently approximately 9000 tonnes of mixed waste stored on site, a large proportion of which can be processed to provide material to be used in the block making process.

1.7.2 In addition to the material already on-site additional material will be imported which can also be used for the manufacture of blocks for sale to the construction industry.

1.7.3 The site will accept the following waste types, consisting of the relevant codes and descriptions from the EWC Waste Classification. The Environment

Protection (Duty of Care) Regulations 1991, as amended, require the use of these codes on all waste transfer notes.

01 WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS

01 04 wastes from physical and chemical processing of non-metalliferous minerals
01 04 08 waste gravel and crushed rocks other than those mentioned in 01 04 07
01 04 09 waste sand and clays

02 WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING

02 02 waste from preparation and processing of meat, fish and other foods of animal origin
02 02 02 shellfish shells from which the soft tissue or flesh has been removed only

03 WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD

03 01 wastes from wood processing and the production of panels and furniture
03 01 01 waste bark and cork
03 03 wastes from pulp, paper and cardboard production and processing
03 03 01 waste bark and wood

10 WASTES FROM THERMAL PROCESSES

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
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10 13 14 waste concrete only

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17 01 07 mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
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17 02 02 clean glass only
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 05 04 soil and stones other than those mentioned in 17 05 03
17 05 06 dredging spoil other than those mentioned in 17 05 05
17 05 08 track ballast other than those mentioned in 17 05 07
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20 01 02 clean glass only
20 02 garden and park wastes
20 02 02 soil and stones

1.7.4 The total maximum amount of waste accepted at the site shall not exceed 10,000 tonnes per annum. The throughput of the site will be limited to a maximum of 200 tonnes per day.

1.7.5 The maximum amount of waste stored on site at any one time shall not exceed 10,000 tonnes initially. When the material already in situ has been processed this storage limit will be reduced to 5000 tonnes.

1.7.6 If the maximum storage capacity of the site is reached then no further waste will be accepted until waste can be processed or removed from site and taken to a suitably authorised facility.

1.8 Staffing and management

1.8.1 The site will be open for the acceptance of waste or for other essential operations during the hours listed in Section 1.4 above. There will be an adequate number of staff and drivers employed on the site during operating hours to ensure compliance with the relevant legislation.

1.9 Health and safety

1.9.1 All operations on site will be carried out in accordance with the relevant requirements of the Health and Safety at Work Act 1974.

1.10 Fit and proper persons

1.10.1 The designated technically competent manager for the site is Dean Hirst. WAMITAB certificates of technical competence along with proof of continuing competence are attached to this document in Appendix 2.

1.10.2 There will be a training programme for all staff involved in site operations to ensure sufficient suitably trained persons are available on site to ensure compliance with the permit. Personnel training records will be maintained and available for inspection in the site office.

1.11 Exempt activities

1.11.1 There are currently two exemptions registered for this site U9 (using waste to manufacture finished goods), and T5 (Screening and blending wastes). The operations covered by these exemptions will be covered by the environmental permit and therefore these exemptions will lapse on permit issue.

1.11.2 Wastes brought onto site as part of an exempt waste activity in the future will be kept clearly segregated and identified from those wastes imported for the specified waste management operations.

1.11.3 Once registered a copy of all exemption notifications and register entries will be kept in the site office.

2.0 SITE ENGINEERING AND INFRASTRUCTURE

2.1 Access and parking

2.1.1 The main access to the site is off Ellifoot Lane. Site location is shown on Drawing No. HB/EMS/01.

2.1.2 There is provision for parking for staff and visitors adjacent to the site office to the left of the entrance gate.

2.2 Notice board and signs

2.2.1 A noticeboard will be located adjacent to the site entrance and will display the following information:

- The site name and address
- The name of the permit holder and operator
- The Environmental permit number
- The Environment Agency contact details
- Operators 'out of hours' emergency number

2.2.2 Additional signs will be displayed around the site for operational and health and safety purposes. All staff and visitors will be required to comply with the requirements of all signs whilst on site.

2.3 Site security

2.3.1 The permitted area is surrounded by a mixture of fencing, walling, bunds and water filled drains. At the southern end of the site stone and wooden fencing barriers prevent access and fencing has been erected between the site and all other surrounding industrial premises. Access from the golf course is prevented by the Burstwick drain to the north west and the East Carr Drain to the north east.

2.3.2 The entrance gate is made up of 2.1 metre high metal paling fencing topped with spikes. The gate is padlocked closed at all times when the site is not operational. This is the only vehicular access to the site

2.3.3 There are 12 CCTV cameras covering the site. CCTV cameras can be monitored from the site office during the day and out of hours by the company directors and technically competent manager via their mobile phones.

2.4 Site office

2.4.1 The site office is located as shown on Drawing No. HB/EMS/03. A copy of the waste permit and management documents will be held on site in the site office. Welfare facilities are provided for site staff.

2.4.2 The following documentation will be retained on site:

- Environmental waste permit
- Management system documents
- Site diary

- Environment Agency inspection forms
- In-house inspection and recording forms
- Hazardous waste consignment notes
- Waste delivery tickets
- Weighbridge tickets
- Accident management plan
- Accident book

2.5 Measurement of waste inputs

2.5.1 There is no weighbridge associated with the site and waste arriving at site is not weighed.

2.6 Wheel cleaning facilities

2.6.1 The site does not have a wheel wash or spinner, however, a large proportion of the permitted area is surfaced with concrete and operations at the site do not lead to residues on the site surface. There is also a significant distance from the waste storage and processing areas and the public highway. As a consequence, it is not felt that mud on the public highway would be an issue other than in exceptional circumstances.

2.6.2 In dry conditions when dust could become windborne as a result of vehicle movements hoses would be used to damp the haul and access roads within the site. Details of these deployments will be retained in the site office and will be available for inspection by the Environment Agency on request.

2.7 Fuel Storage

2.7.1 Diesel and gas oil are stored in fuel storage tanks close to the site entrance. The tanks are located within bunds capable of holding 110% of the capacity of the largest container.

2.8 Waste Quarantine area

2.8.1 An area for the storage of rejected waste is provided on site for the deposit of material that cannot be removed from the site immediately. The location of this quarantine area is shown on Drawing No. HB/EMS/03

2.9 Drainage

2.9.1 The concrete pad used for waste processing falls to a drainage system which collects run-off and channels it into a three-phase interceptor. The interceptor discharges to East Carr Drain.

2.9.2 The location of the interceptor and discharge point are shown on the plans in Appendix A.

2.9.3 The concrete pad used to house blocks and the manufacturing plant is not drained.

2.10 Surfacing

2.10.1 The site is partly surfaced with an impermeable concrete pavement. All waste processing and storage areas are located on the concrete surface. The remaining areas of the site are composed of permeable hardstanding.

2.11 Vehicles, plant and equipment

2.11.1 Plant and equipment associated with the treatment and transfer of waste will be in use at the site at any time. Additional equipment may be installed as required.

3.0 SITE OPERATIONS

3.1 Preliminary procedures

3.1.1 Guidance will be given by the site management (operator and permit holder) to all employees, sub-contractors, other waste carriers and customers regarding the waste types which are acceptable at the site. Carrier registration details will be taken for any new haulage operators bringing waste to the site and the details will be periodically checked via the Environment Agency's website to ensure that they are still registered.

3.1.2 The bulk of the waste processed at the facility will be delivered to site by third party contractors.

3.1.3 Where material is to be collected by a vehicle belonging to the permit holders an initial inspection will be made by the driver prior to loading the material onto the wagon. Should waste items that are not permitted at site be noticed then the driver will request that these be removed prior to the load being taken away.

3.1.4 Waste will only be accepted at the site if the consignment has been pre-notified to the operators.

3.2 Checking in and inspecting loads

3.2.1 On arrival at the site the driver will report to the site office. The load will be visually inspected to ensure that the composition of the waste complies with the documentation and that it is in a satisfactory condition and suitable to be used in the block making process.

3.2.2 Operators arriving at site without a valid waste carriers registration will not be allowed to deposit waste.

3.2.3 If unsuitable waste is discovered before deposit the load will not be unloaded and will be rejected by the operator and returned to the producer. In cases where the unauthorised waste is likely to lead to a breach of permit conditions or where the rejected waste is thought to be hazardous the Environment Agency will be contacted.

3.3 Waste deposit, manual handling and storage

3.3.1 If accepted at the site, waste will be unloaded into the designated storage areas.

3.3.2 Waste already on site is stored on the eastern boundary of the site. The majority of the material is stored on hardstanding and has been since 2014.

3.3.3 Processing of the in-situ material will take place on the concrete pad with a drainage system.

3.3.4 Loads are inspected when they are deposited to ensure that they comply with the terms of the site permit.

3.3.5 All staff who work on the site shall be made aware of the acceptable categories of waste allowed to be deposited. Site staff shall be responsible for inspecting each load. To ensure compliance with this, periodic spot checks shall be made by the site manager.

3.3.6 Should non-permitted waste be deposited within a load delivered to site by a vehicle outside the ownership of Humberside Blocks (2012) Ltd then, where possible, the material will be re-loaded into the vehicle and the driver shall be asked to leave the site.

3.3.7 Persistent non-compliance with the terms of the site permit by a contractor may result in the contractor being banned from the site for a specified length of time to be determined by site management.

3.3.8 Rejected wastes not immediately returned to the customers will be deposited in the quarantine area and will be recorded in the site diary.

3.3.9 In the unlikely event of any non-permitted hazardous waste being found in the loads, arrangements for its removal from site shall be made as a matter of urgency by means of a specialist contractor operating to the requirements of the relevant legislation. In such cases the Environment Agency will be informed of the nature and quantity of the waste involved and the date and time it was noticed.

3.3.10 Whilst on site such non-compliant hazardous waste shall be handled in accordance with site procedures and the material shall be placed within the quarantine area if possible.

3.3.11 No material will remain within the quarantine area for longer than seven days.

3.4 End of life vehicles

3.4.1 The site is not permitted to accept end of life vehicles for depollution.

3.5 Waste removal and export

3.5.1 The majority of waste brought onto site are used in the block making process and as a consequence will leave the site as a product.

3.5.2 Waste material already on site contains a mixture of materials, only some of which can be utilised. Sorted and screened plastic, rubber, scrap metal and other non-viable material will be removed from site and taken to a suitable facility for recycling or disposal.

3.5.3 When the in-situ material has been processed only a small fraction of material arriving at site will leave as waste. This is normally in the form of plastic which is screened out and placed in a skip for diposal.

3.6 Record keeping

3.6.1 The details below will be recorded on a combination of the record keeping forms, invoices, the site diary and controlled waste transfer notes or hazardous waste consignment notes when required. The records will be kept in paper or electronic format and be available in the site office for inspection upon request.

3.6.2 The following details will be recorded for every load deposited at the site:

- The date and time of delivery.
- The name and address of the waste producer.
- The type and quantity of waste including EWC code.
- The carriers name and address.
- Drivers name and vehicle registration number.

3.6.3 The following details will be recorded for all deposits of non-conforming waste at the site and will be forwarded to the Environment Agency where required:

- Date and time of deposit.
- A description of the waste including EWC code.
- The quantity of waste.
- Name, address and telephone number of the waste producer.
- The carriers name and vehicle registration number.
- The reason for the rejection of the waste and the action taken.

3.6.4 The following details will be recorded for every load of waste leaving the site:

- The date and time of removal.
- The type and quantity of waste including EWC codes.
- The destination waste management site or exempt facility.
- The name and registration number of the carrier or employee removing the waste.

3.6.5 A summary of the waste types and quantities deposited and removed from the site will be provided to the Environment Agency at intervals specified by the environmental permit for the site in a form approved by the Agency.

3.6.6 The outcome of all inspections of waste types, yard areas, storage tanks, bunds, drainage channels etc. will be recorded and detailed comments will be entered into the site diary including action taken or proposed.

3.6.7 Visitors to the site will sign the visitors book upon arrival and exit stating the purpose of their visit and whom they represent.

4.0 ENVIRONMENTAL CONTROL, MONITORING AND REPORTING

4.1 Breakdowns and spillages

4.1.1 In the event of a breakdown of plant or equipment an alternative will be brought onto site until it is repaired. If an alternative machine cannot be used then no further waste will be accepted until suitable plant is obtained. Minor repairs on plant and machinery will be carried out on site with absorbents used to clear oil or fuel spillages. All other operations on site will continue as normal.

4.1.2 All internal and external site surfaces will be inspected daily when the site is in operation. Debris will be swept as required and placed in a skip for disposal.

4.1.3 Any spillages of fuel will be cleared immediately by depositing sand or absorbents on the affected area. The sand or adsorbents will be placed in a container to be taken to a suitably authorised site for disposal. All spillages of waste on the yard area and any windblown litter will be cleared by the end of the working day on which they occur. Spillage clearance procedures are detailed in Section 5.

4.1.4 All wastes liable to give rise to contamination will be removed from the site if the site is not secure or if operations cease or are temporarily, suspended.

4.2 Site inspections and maintenance

4.2.1 The inspections for maintenance or housekeeping will be completed by a person who is familiar with the requirements of this management system and environmental permit for the site. All details of defects, problems and repairs carried out will be recorded in the site diary on the day that each event occurs. Detailed comments may also be recorded. All repairs will be carried out within five working days unless otherwise agreed with the Environment Agency.

4.2.2 All repairs to site security will be made within five working days of the discovery of the damage and the site will be made secure until the repair has been effected.

4.2.3 Any major defects found during the daily site inspection which are likely to lead to a breach of permit conditions will be repaired by the end of the working day in which they were found where possible. If a repair is not possible by the end of the working day the Environment Agency will be contacted to agree a suitable timescale for the repair.

4.2.4 All defects and problems likely to give rise to pollution will be recorded in the site diary with repairs or solutions being carried out as soon as is practicable.

4.2.5 A programme of planned maintenance will be followed and ensuring manufacturers recommendations for inspection and maintenance are carried out. Essential spares for plant maintenance will be kept on site.

4.2.6 Waste processing areas, storage areas, concrete hardstanding, buildings, kerbs and bunding will undergo weekly visual checks for wear and tear or physical damage.

4.2.7 All drainage systems will be inspected at twice weekly intervals to ensure that they are functioning effectively. Any silt traps will be inspected and emptied when necessary. Oil/water mixtures collected in the sumps will be removed as required.

4.3 Monitoring and control of debris and site residues

4.3.1 Vehicles will be visually inspected before exit to check that loads are secure and that no debris is carried out on the wheels or body of the vehicle to ensure that they comply with the requirements of the Duty of Care. Visual inspections of the site are carried out daily and staff will report any problems with debris on the site surfaces immediately to the site manager.

4.3.2 The deposit of materials on the public highway will be treated as an emergency and will be cleared immediately by the operator either by hand or by using a road sweeper.

4.3.3 Only a small proportion of the waste material accepted at the site will leave as waste. This is residual waste, normally plastic, which leaves the site in sheeted skips. The majority of the waste is incorporated into the block making process and leaves the site as a finished product.

4.4 Monitoring and control of dust

4.4.1 The site does not accept dusty wastes but it does, however, have a large external area that could potentially dry out and become dusty.

4.4.2 Historical observations have noted no substantiated dust complaints against the site.

4.4.3 Should a dust problem develop, or a complaint be received from members of the public or the Environment Agency then immediate action will be taken to identify the source. This includes investigating other potential sources outside the permitted area of the site.

4.4.4 If a dust issue is identified within the site then action will be taken to deal with the problem immediately. Dusty areas will be dampened down to prevent dust from becoming airborne and concrete areas will be swept clean.

4.5 Monitoring and control of odour

4.5.1 The site does not accept domestic refuse which can be odour forming, nor is waste kept on site for a significant length of time.

4.5.2 Historical observations have noted no substantiated odour complaints against the existing site and it is not anticipated that the site will generate odour complaints in the future.

4.5.3 Site operatives and site management remain vigilant for odours resulting from waste management operations.

4.5.4 Should an odour problem develop, or a complaint be received from members of the public or the Environment Agency then immediate action will be taken to identify the source. This includes investigating other potential sources outside the permitted area of the site.

4.5.5 If an odour issue is identified within the site then action will be taken to deal with the problem immediately. Suspected waste will be removed from the site and an investigation into waste acceptance procedures and waste storage times undertaken.

4.6 Monitoring and control of litter

4.6.1 The site does not accept putrescible material that can become windblown.

4.6.2 On-site training for site operatives includes good housekeeping practices. Any loose waste that does escape is cleared up at the end of the working day and placed in a container for removal from site.

4.6.3 A daily check of the site and the site boundaries is carried out as part of the site managers daily inspection and is recorded in the site diary. Checks off site in the vicinity are carried out following periods of adverse weather conditions where there is a possibility of litter escape from site or in the event of a complaint. If it is determined that action is required site staff will be despatched to clean the affected area.

4.7 Monitoring and control of pests, birds and other scavengers

4.7.1 The site will be inspected daily for the presence of vermin and the results of the inspection noted in the site diary or site inspection form. If the presence of vermin is detected a pest control contractor will be contacted immediately to provide appropriate remedies.

4.8 Monitoring and control of noise

4.8.1 Noise levels shall be controlled by using efficient silencers on all on-site plant and machinery. A regular and effective plant maintenance programme shall ensure that all noise reduction measures continue to operate effectively.

4.8.2 Any incidence of noise nuisance or complaints shall be investigated, and where applicable, corrective mitigating action taken. All action will be recorded in the site diary and the Environment Agency informed if necessary.

4.9 Environmental monitoring and reporting

4.9.1 No surface water or groundwater monitoring is required at this time.

4.9.2 Weather conditions will be logged in the site diary if they are likely to lead to a breach of permit conditions.

4.9.3 All complaints received, and action taken, in respect of any complaints will be recorded in the site diary.

4.9.4 The site diary and all associated monitoring forms will be available for inspection, in the site office, at all times upon request.

4.10 Monitoring of sewer discharges

4.10.1 There are no sewer discharges associated with waste management operations at this site.

5.0 EMERGENCY PROCEDURES

5.1 General

5.1.1 In addition to obligations imposed by RIDDOR '95 (Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995) the operator will notify the Environment Agency of any serious injuries to employees, other site users or members of the public arising as a result of operations on site. Minor injuries such as cuts and bruises will be recorded in the accident book on site. Separate procedures will be used for different types of emergencies. An emergency at the site is defined by site management as follows:

'Any incident likely to result in harm to human health or pollution of the environment or serious breach of permit conditions and serious detriment to the amenities of the locality.'

5.1.2 For all emergency situations the deposit of any further waste will be suspended where necessary to allow action to be taken safely. If necessary staff and other users of the site will be evacuated to an area which is a safe distance away from the hazards. Staff handling the emergency will be provided with and trained to use the necessary PPE unless the manager instructs that the hazard is too severe and outside help is needed from the emergency services or specialist waste contractors.

5.2 Fire

5.2.1 No waste will be burned on site. Any fire on site will be treated as an emergency.

5.2.2 Details of the potential fire risks on site and the methods of dealing with a fire are contained in the document entitled Fire Prevention Plan associated with this permit.

5.3 Spillages

5.3.1 If any spills occur from plant, vehicles or stored fuel and oil a spill containment kit (absorbent pads, booms or granules) will be used to prevent further spillage and the contaminated absorbents placed in a container for disposal at a suitably permitted site.

5.4 Adverse reactions

5.4.1 No wastes are accepted which will react to present such a hazard. All containers arriving at the site are nominally empty.

5.5 Poor visibility

5.5.1 The site will not operate in conditions of poor visibility such as dense fog to reduce the risk of vehicle collision or other accident.

5.6 Operational Failure

5.6.1 The manager will be contacted in the event of any operational failure such as the breakdown of plant, systems or equipment and will decide whether operations are to continue or be suspended prior to corrective action being taken. Operational failures which result in the closure of the site will be recorded in the site diary.

5.7 Overturned vehicle

5.7.1 If a vehicle is overturned on the site or near the site entrance then no further waste will be accepted until the vehicle is righted and any spillages have been cleared as described in Section 5.3.

6.0 CONTINUAL IMPROVEMENT

6.1 Review

6.1.1 Humberside Blocks (2012) Ltd are dedicated to continually improving site operations through investment and modification in staff and infrastructure. This Environment Management System is due for review before the end of September each year. The next review is to be carried out prior to 31 January 2022. Any amendments made to this plan will be sent to the Environment Agency for their consideration and incorporation into the environmental permit.

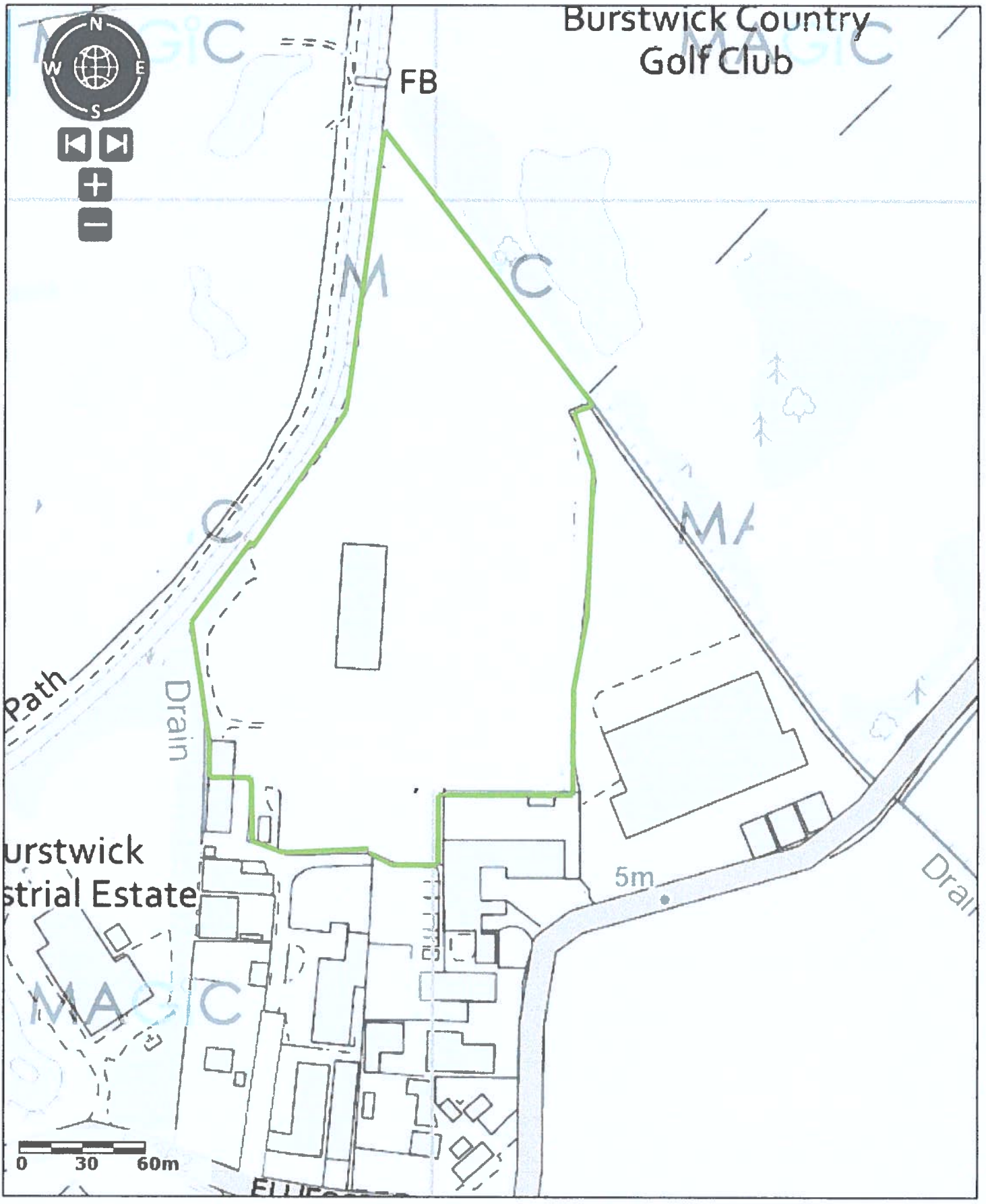
APPENDIX 1

DRAWINGS

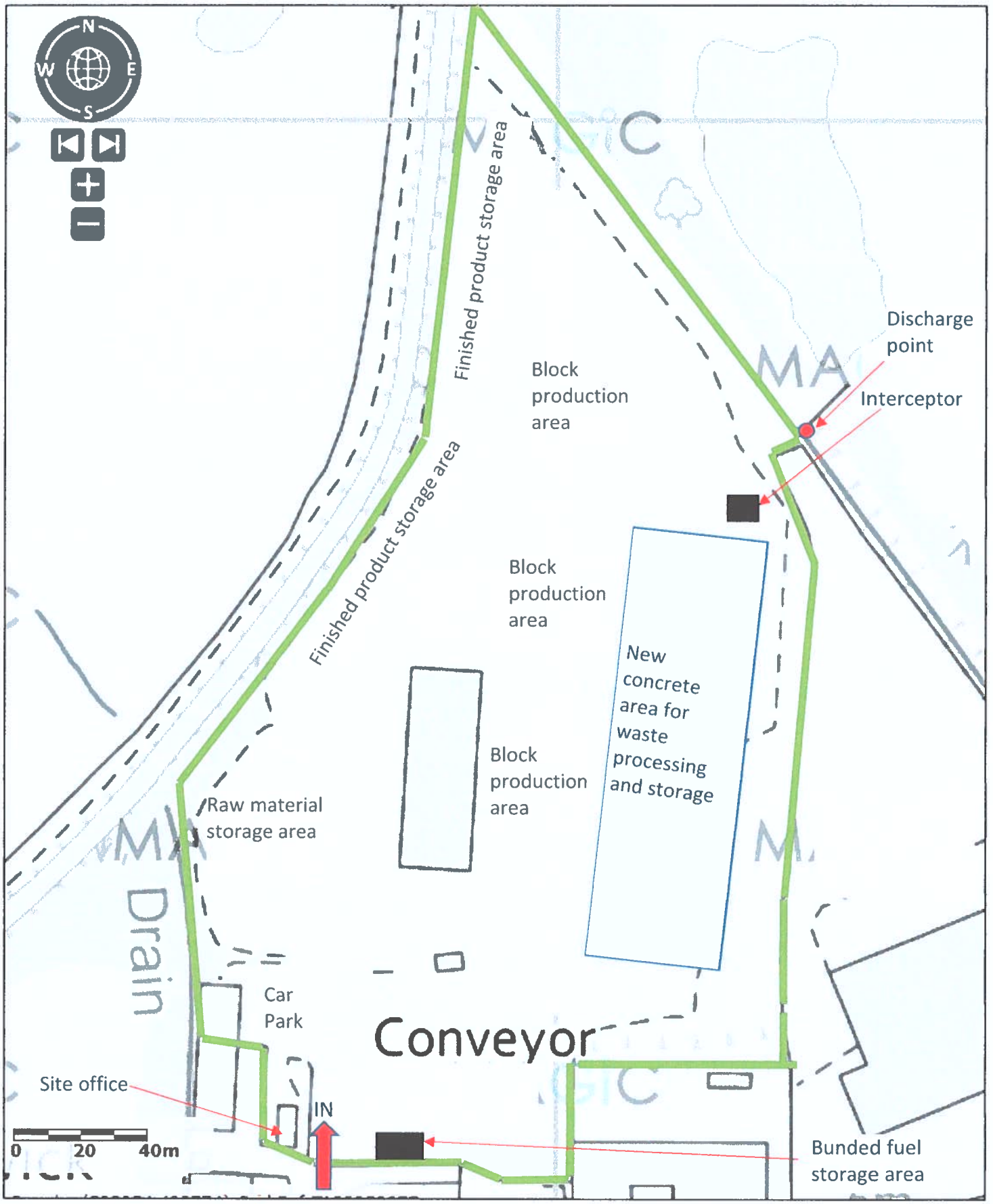
Drawing No. HB/EMS/01 - Site location map

Humberside Blocks, Elliffot Lane, Burstwick, Hull

Drawing No. HB/EMS/02 - Permit boundary plan



Drawing No. HB/EMS/03 - Site layout plan



APPENDIX 2

TECHNICAL COMPETENCE CERTIFICATES

Qualification Title:

WAMITAB Level 4 Medium Risk Operator Competence for Non-Hazardous Waste Treatment and Transfer

Qualification Accreditation Number:

601/8528/4

This Certificate is awarded to

Dean Hirst

Verification date: 07/08/2019

Authorised:

Chris James
WAMITAB Chief Executive Officer

Learner ID: 107998

Certificate No.: 5147874

Date of Issue: 07/08/2019

Regulated by Ofqual

Corff dyfarnu cydnabyddedig
Cymwysterau Cymru Qualifications Wales
Recognised awarding body

CEA Regulation

The qualifications regulators logos on this certificate indicate that the qualification is accredited only for England, Wales and Northern Ireland. Qualifications Wales regulates this qualification where it is awarded to learners assessed wholly or mainly in Wales.

00132099

DUST MANAGEMENT PLAN

Humberside Blocks (2012) Ltd

Ellifoot Lane

Burstwick

Hull

HU12 9EF

Version 1.0

January 2021

SJW Enviro Consulting Ltd

CONTENTS:

1. INTRODUCTION

1.1 This is the Dust Management Plan (DMP) for the waste management facility operated by Humberside Blocks (2012) Ltd at Ellifoot Lane, Burstwick, Hull. The site processes a variety of different waste streams and incorporates these wastes into the manufacture of blocks for the construction industry. The DMP forms part of the environment management system that the company operates to ensure that their operation meets the legislative requirements and operates to the highest environmental standards. The DMP is a living document subject to on-going review, with updating as appropriate.

1.2 Dust and particulate matter arising from the waste processing operations can cause concern and generate complaints. The operators must be aware of the potential to cause offence and the effect of dust on equipment, machinery and nearby land uses.

1.3 Dust is small particulate matter between 1 and 75 microns and is produced by the processing of waste material. The amount of dust generated is a factor of the nature of the material, the method of handling and the volume of material being handled. Mechanical handling creates dust in proportion to the size of the machinery used and the volume of material moved. Haulage creates dust in proportion to the size and weight of vehicles together with the speed and number of passes.

1.4 Dust emission is the process by which dust become airborne. The most significant cause is windblown. Once dust is created and becomes airborne, air currents disperse it. Fine dust particles can be deposited over a wide area.

1.5 Obviously the production of dust is not welcomed. In addition to being an irritant and health hazard, dust results in additional costs through control and potential plant breakdown, repair and maintenance. It is in the operators interest to control and reduce dust to a minimum. The control of dust at a site is based on the effective implementation of best practices. This assessment identified the cause of dust and describes the methods which will be involved in the management of dust to reduce the likelihood of dust being produced and blown within or beyond the boundaries of the site.

2. THE SITE

Site setting

2.1 The site at Ellifoot Lane, Burstwick lies at the northern end of a small industrial estate in a predominantly rural environment to the east of the city of Kingston upon Hull. It is comprised of a variety of buildings and open yard areas mainly associated with the production of blocks for the construction industry. The site access is via Ellifoot Lane and an unmade access road. Details of the site layout are shown in the site layout plan in Appendix 1 attached to this document.

2.2 The nearest residential property is located 280 metres to the South of the site along Appleby Lane. The site is surrounded to the East and West by Burstwick Country Golf Club and directly to the South by industrial units. To the North lies agricultural land. The village of Burstwick lies approximately 550 metres to the South of the site.

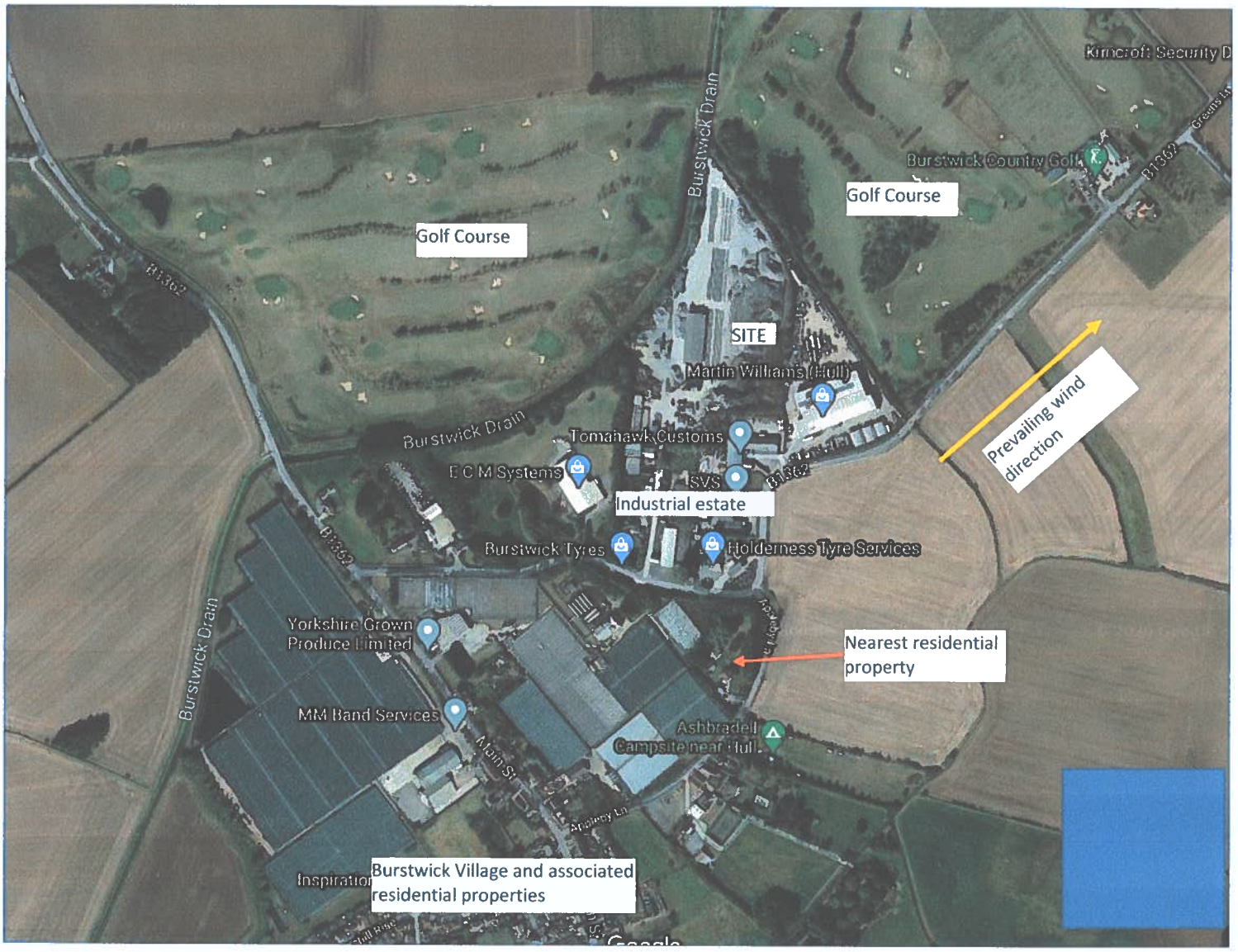
Operations

2.3 Operations at the site are centres around the production of blocks for the construction industry. Blocks are formed by combining a mixture of raw materials and recycled waste products.

As well as the everyday block manufacturing process a large quantity of material deposited at the site also requires processing. In 2014 up to 9000 tonnes of material destined for the block making process was delivered to the site with the European Waste Classification of 19 04 04. In reality the material was a mix of plastic, glass, rubber, metal and other material. The glass was in the form of PVB glass which is used primarily in car windscreens and is glass laminated between thin layers of plastic. This material did not meet the requirements of the waste management exemptions that the site benefitted from at the time and consequently a permit is required to process this material to recover glass that can be incorporated into the block making process. This is a one-off operation and the site will not accept any material of this nature in the future.

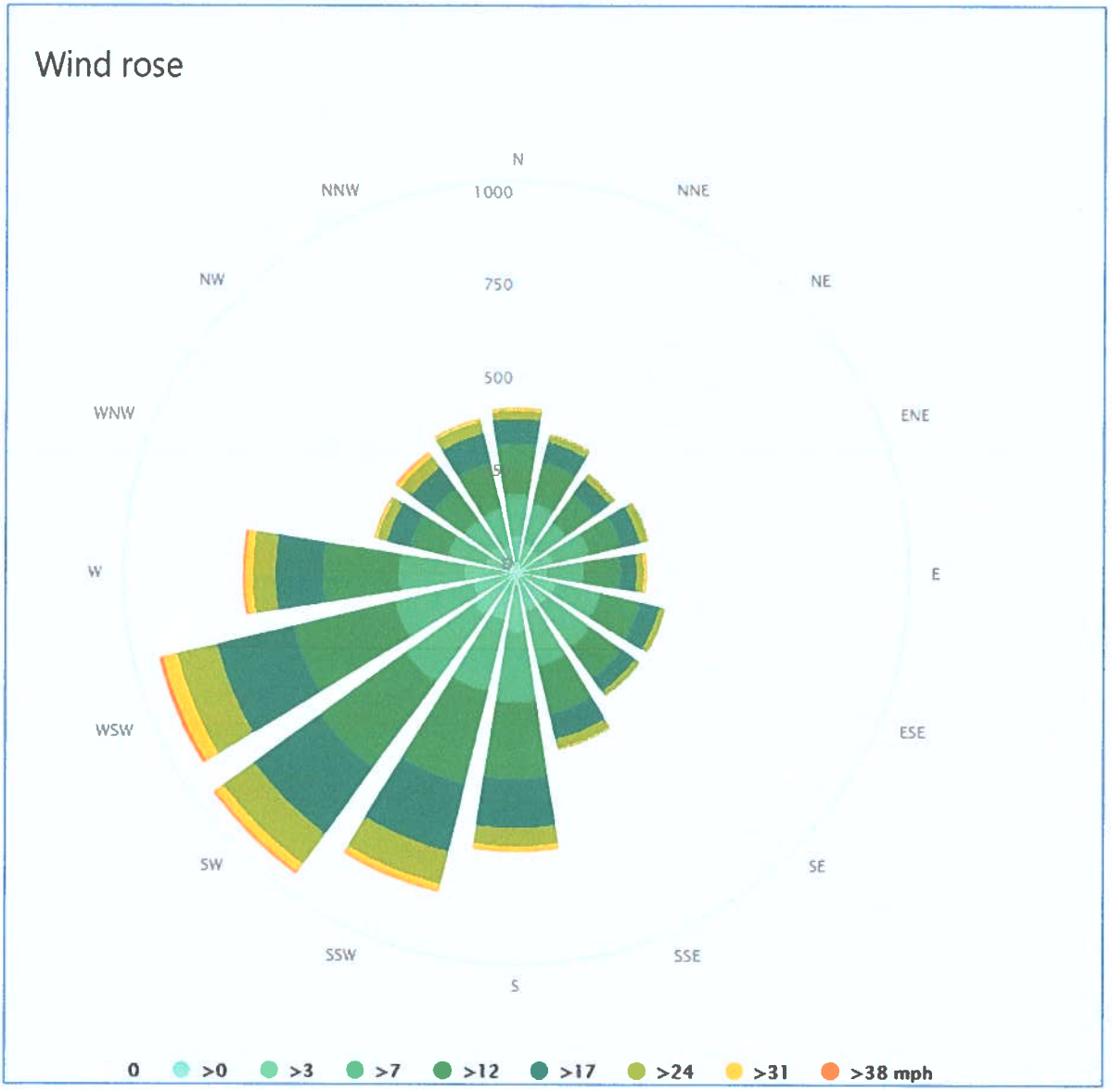
2.4 Loads of material to be incorporated into the block making process will be delivered to site and placed in bays on the concrete pad. These are then mixed together in the batching plant with raw materials as required.

Sensitive receptors



2.5 The map above shows the bulk of the sensitive receptors, in particular the residential areas in the village of Burstwick lie to the south of the site. The wind rose below, which is for the Hull area, indicates that the predominant wind direction is from the south west and west south west. The yellow arrow above shows the direction of the prevailing wind.

2.6 The industrial premises to the east of the site and the golf course to the north east are therefore the most sensitive to potential dust generated at the site.



3 DUST GENERATION AND CONTROL

Dust Generation

3.1 The most likely dust generation activities are:

- Unloading, movement and transfer of waste material
- Processing of the waste material
- Dust from wheels of vehicles
- Stockpiling of waste

- Dust generated from unpaved and little used parts of the site

Dust Control

3.2 The main principles for preventing dust emissions at the site are by avoidance of dust then containment of dusty processes and suppression of dust by spraying and other control methods.

3.3 The management of dust within the site is undertaken by:

Avoidance/Containment

- Large, fixed plant, batching machinery located within a building where dust cannot become windblown.
- Road sweeping of paved site entrance, and Elliffot Lane as required
- Wetting of material prior to processing or loading if appropriate
- Loads of material sheeted when arriving at site
- Use of wheel wash if appropriate

Suppression

- Water sprays used on waste stockpiles
- Hourly (or more frequently if appropriate) use of water bowser to damp down access roads and waste processing areas during dry conditions

Movement of Material

3.4 All loads arriving at the site are sheeted to prevent any dust during transportation. The transportation of material within the site can cause dust arising from the wheels of plant or vehicles. Damping down using hosepipes and good housekeeping can minimise the problem.

Storage

3.5 All waste material is stored in bays on the concrete pad to the eastern side of the site. The material already in-situ comprising PVB glass and associated contaminants is also stored to the eastern side of the site.

3.6 The height of stockpiles of material at the site is kept to a minimum wherever possible and there is a rapid turn-around of material on site. When the waste arriving on site it is stored in discrete piles around the large yard area and there is significant separation between each waste type.

Waste is stored in its largest form and waste pile sizes are kept to a minimum where possible.

The largest pile of in-situ material will be limited to 675 cubic metres (15m x 15m x 3m).

Processing

3.7 The waste processing equipment comprising the block manufacturing machinery in the batching plant are contained within a building on site and as such should not give rise to windblown dust.

3.8 The material that is already in-situ and requires processing will be processed on the concrete pad using equipment as specified within the Environment Management System for the site. The process is time limited. When all the material that is currently on site has been processed no more of this type of waste will be imported.

3.9 Processing of the in-situ material will only take place when conditions are suitable. That is when the prevailing wind speed is less than 5mph.

3.10 Prior to the processing of any of the in-situ material the stockpile will be damped down to ensure that no windblown material leaves the site.

Dust from Vehicle Movements and Machinery

3.11 Dust from the movement of machinery and vehicles on site will be reduced or controlled by:

- The roads and operational yard areas being washed and dampened by hose pipes in dry conditions where there has not been any antecedent rainfall in the previous 48 hours.
- Regular sweeping of roads and operation yard areas
- Spillages on roads will be cleaned up immediately
- Vehicle speeds will be reduced in dry, windy weather
- Prior to leaving the site, any vehicles which have material adhering to external surfaces which have the potential to cause windblown dust will be cleaned. This is particularly relevant to vehicles that have accessed unpaved roads within the site. The responsibility for assessing vehicles leaving the site will be with site staff and the vehicle driver.

Dust from Loading Activities

3.12 Loading shovels and grabs are used to load material into the batching plant. Where the loading has the potential to give rise to dust the material will be damped down prior to loading. Any spillages during loading will be cleaned up immediately as part of good housekeeping practices that site staff are trained to observe.

3.13 When loading and unloading vehicles drop heights will be reduced to an absolute minimum in order to avoid the potential of dust formation.

Contingency Provisions

3.14 There will be contingency provisions for replacement plant and parts relating to any equipment forming part of the DMP provisions. For key plant contingency measures will be in place to ensure that the equipment can be repaired or replaced within 24 hours of a breakdown.

3.15 Site maintenance activities are performed in accordance with operating procedures. The company understands the importance of routine preventative maintenance. In summary, the following provisions are implemented:

- Plant maintenance schedules using the manufacturer's recommendations where vehicles are serviced after 500 hours of operation;
- Pre-use checks are completed prior to using plant and equipment daily;

- Defects are reported and actions taken to rectify the problem or remove the offending item from service until such time as the issue is resolved;
- All plant and equipment is visually inspected by the operator at the end of the working day;
- Throughout the day operators are vigilant in checking vulnerable areas like exhausts and engine bays;
- Specialists contractors are used to perform maintenance outside the scope and expertise of the site management and operatives;
- All documentation relating to plant and equipment maintenance is retained in the site office for inspection.

3.16 Where key plant can't be repaired or replaced within 24 hours or other failure of dust suppression equipment occurs additional contingency provisions will be considered involving cessation of relevant processing operation and diverting scheduled waste deliveries away from site, as appropriate.

3.17 The site manager is responsible for the operation of the dust management plan and all site operatives will be trained, and required, to take mitigation action. They will also be required to take preventative action to avoid dust by clearing any spillages of materials, maintaining dust suppression equipment, repair of defective dust suppression equipment, maintaining roads clean and in good condition and by keeping plant and equipment dust and mud free. Additionally, any contractors working on site will be made aware of the provision of the dust management plan and be required to comply with the relevant provisions as appropriate to any work they are undertaking on site.

3.18 A full training programme for all site staff on the contents of this and other management plans will be undertaken with annual refresher courses implemented. Individual training records for site staff will be maintained.

4 DUST MONITORING

4.1 At all times dust will be monitored by visual assessment.

4.2 The site manager will ensure dust management measures are undertaken as appropriate to the site operations and current weather conditions. The site manager will be responsible for keeping records of monitoring and mitigation measure. All records will be retained in the site office for inspection as required.

4.3 If further management measures are taken to control dust or weather condition monitoring, the additional mitigation measures will be recorded. In certain adverse weather conditions visual monitoring will be more intensive.

4.4 If airborne dust is reported the site manager will investigate the incident and ensure addition mitigation measures are employed. Additional measure may include cleaning and damping haul roads above normal site practices. Additional measures undertaken will be recorded in the site diary. The site manager will ensure that the Environment Agency are informed within 24 hours of any additional measures.

4.5 Should weather condition and operations be such that dust is being blown beyond the boundaries of the site, towards residential properties or adjacent industrial premises, and all efforts to prevent this have failed then the operations responsible for generating the dust will

be stopped until the weather has changed. The site manager will ensure that the Environment Agency are informed within 24 hours of any pollution or risk of pollution caused by dust creation.

4.6 The site manager will periodically review operations in relation to dust matters together with any complaints, EA inspection reports, monitoring results and weather station information. The results of the review shall be used to assess the need for changes to the DMP including amending site procedures and further monitoring work if necessary.

4.7 Should the site manager or other technically competent managers be unavailable to respond to dust management issues or complaints the responsibility shall fall to the most senior member of staff on site to implement the control measures detailed in this plan.

4.8 A daily assessment of dust levels will be undertaken by the site manager or TCM. The points where monitoring will be undertaken are shown on the aerial photograph below.

4.9 The results of the daily dust monitoring assessment will be retained in the site office and be available for inspection on request.

4.10 Notwithstanding the above, the DMP will be reviewed annually by the site manager or otherwise in response to a request from the Environment Agency, changed circumstances such as the operation of new processing plant or substantial dust complaint.

5 DEALING WITH COMPLAINTS

Complaints procedure

5.1 In the event of any complaint from householders, local businesses, the local authority or the Environment Agency an investigation will be undertaken into the circumstances. Where the complaint resulted from activities within the site, steps will be taken where possible to reduce the impact of, or remove, the dust source. Any investigation will be concluded within 24 hours and the complainant will be informed by the end of the next working day of the outcome and any mitigation measures taken. The Company will maintain a daily record of complaints and investigations, together with any mitigation measures taken. This record will be made available to the Environment Agency on request.

5.2 All complaints, whether substantiated or not, will be recorded on the dust complaint form detailed in Appendix 3. Copies of all completed forms will be retained in the site office for inspection by interested parties upon request.

5.3 If the source of the dust or particulate emission cannot be ascertained with 100% confidence, the site manager on duty will suspend the **likely** dust/particulate generating activities.

Escalation of complaints

5.4 Should further substantiated complaints be received on the same day as the initial complaint then all operations on site will be suspended and no further waste will be accepted.

5.5 Upon suspension of activities the site manager will undertake a full inspection to identify the dust source and put in place mitigation measures, for example, further damping down on site surfaces, removal from site of particularly dusty waste streams or the cleaning of plant and equipment as necessary.

5.6 Operations will not re-commence until all mitigation measures have been completed.

5.7 Once operation re-commence then the site manager will undertake a full check of the monitoring points around the perimeter of the site.

5.8 The Environment Agency will be informed within one hour of operations being suspended and details of the suspension will be noted in the site diary.

Review of complaints

5.9 The site manager or technically competent manager will be responsible for responding to and dealing with complaints from members of the public, the local authority, Environment Agency or other interested parties. Contact details will be available on the notice board at the site entrance.

5.10 In all cases, any new "lessons learnt" from the site manager's investigations will be considered by the company directors and implemented into dust & particulate emission management plan (if not already included), to prevent a re-occurrence of the alarm. Any additions to this plan will be communicated to the Environment Agency for their consideration.

Stakeholder engagement

5.11 There are a large number of industrial and commercial units and a small number of domestic dwellings within 500 metres of the site boundary. Occupiers of these units and properties are made aware that they can visit the site at any time to inspect the operation.

5.12 In the unlikely event of wind-blown dust or particulate matter being carried off site local residents and businesses would be informed of operations to control emissions personally by site staff.

5.13 Outside of site opening hours local residents and businesses will be provided with an emergency contact number.

6 CONCLUSIONS AND MITIGATION MEASURES

6.1 The operations at the site do, at times, produce dust but the dust produced will be limited by the nature of the operations and the mitigating measures. In any event dust will be controlled to confine and prevent its escape and to minimise airborne dispersal.

6.2 At this site the main causes of dust relate to processing, transportation and stockpiling.

6.3 Dust from processing will be controlled by sensible site management including careful movement by experienced operators, use of hose pipes, limiting location of certain processing operations, operation of best practice in terms of housekeeping and, if necessary, with cessation of operations in certain weather conditions.

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

- Regular review of prevailing weather conditions and site operations
- Keeping surfaces damp where windblown dust could potentially be generated
- Sheeting of loads
- Keeping hard surfaces damp in hot, dry, windy weather using hose pipes
- Regular maintenance of all plant and equipment
- Keeping vehicles clean and dust free and limiting the speed of vehicles in adverse weather conditions
- Careful moving of material
- Damping down of stockpiles prior to loading into block making process in potentially dusty conditions
- Postponing operations if significant wind-blown dust is likely to result.

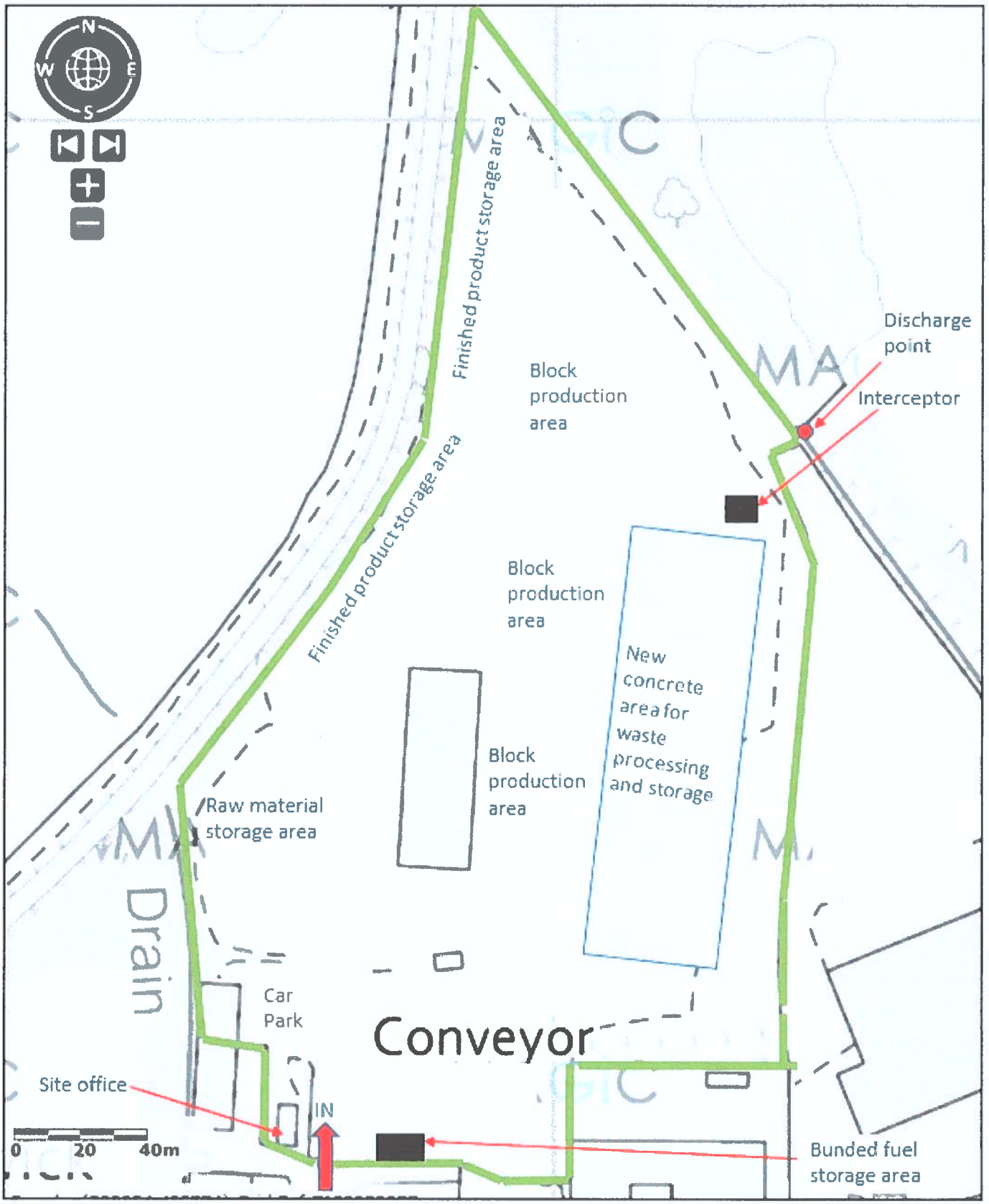
6.5 If all mitigation and control measures fail and dust emissions are leaving the site then the site will be closed to all new arrivals and waste processing will cease until such time as the emission of dust and particulates can be brought under control. The Environment Agency and local planning authority will be informed of the situation immediately.

6.6 Ongoing monitoring of dust levels and review of operation of the DMP, with appropriate updating, will ensure continuing effective dust management at Humberside Blocks (2012) Ltd without any adverse dust impacts off site.

DUST MANAGEMENT PLAN

APPENDIX 1

Site Layout Plan


N
W
E
S
Finished product storage area
Finished product storage area
Block production area
Block production area
Block production area
Discharge point
Interceptor
New concrete area for waste processing and storage
Raw material storage area
Drain
Car Park
Conveyor
Site office
IN
0 20 40m
Bunded fuel storage area

DUST MANAGEMENT PLAN

APPENDIX 2

Housekeeping Form

Site Managers daily checklist

Name .....

Date .....

Time .....

Have any incidents or potential problems relating to fire prevention, dust, odour and noise management been reported on site during the previous 24 hours?	Yes	No
Details and remediation undertaken:		

Have any incidents or potential problems relating to fire prevention, dust, odour and noise management occurred during the previous 24 hours which would require reporting to the Environment Agency, Hull City Council or the emergency services?	Yes	No
Details of report and persons reported to (including name and contact number):		

Do any of the prevention or management plans associated with the waste permit require updating	Yes	No
Details:		

Inspection of building and waste piles.

Waste Pile / Building	Signs of fire, heat, steam, vapour, dust, noise, odour or any other anomalies (Tick box)		If Yes, remedial action undertaken
	Yes	No	
Site office			
Storage buildings			
Batching plant			
Waste storage piles			
Raw material storage piles			
Block production areas			
Block stockpile areas			
Vehicles and plant on site			
Internal haul roads			

Fire Extinguishers

	Yes	No
Are fire extinguishers appropriate for the materials in the areas where they are mounted?		
Are extinguishers free from obstruction or blockage?		
Are all extinguishers fully charged and in their designated places?		

Action required:

Site staffing

	Yes	No
Is the yard manager on site and if not has a deputy been appointed who is aware of the obligations under the fire prevention plan and dust management plan?		
Are all site staff trained in the use of fire extinguishers and undertaken refresher courses as necessary?		
Are all staff aware of the contents of these plans and their role if issues are detected?		

Action required:

Site infrastructure

	Yes	No
Are all signs relating to flammable liquids and no smoking visible and legible?		
Are there any obstructions which could prohibit emergency service access?		
Are exits from all buildings clear, adequately signed, illuminated and free from obstruction?		
Has there been any changes on site to plant, equipment, infrastructure or working practices that would require modification to the plans?		
Are the access roads within the site dry?		
Have all surfaces within the building been swept clean of dust and litter within the past 24 hours?		

Action required:

Off-site checks

	Yes	No
Have all monitoring points been assessed for dust?		
Are there any obstructions which could prohibit monitoring at any of the check points?		
Was there any evidence of dust detected at any of the monitoring points?		
Is Elliffot Lane free of debris which could have originated on site?		

Action required:

Additional comments and remedial action
Signed ..... Time .....

DUST MANAGEMENT PLAN

APPENDIX 3

Complaint Form

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

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

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

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

FIRE PREVENTION PLAN

Humberside Blocks (2012) Ltd

Ellifoot Lane

Burstwick

Hull

HU12 9EF

Version 1.0 January 2021

SJW Enviro Consulting Ltd

CONTENTS:

1.0 Purpose

The purpose of this document is to identify potential fire hazards, detail the controls implemented to prevent fires and the actions taken to reduce the impacts should there be a fire on site.

This plan has been prepared in conjunction with the format prescribed by the Environment Agency and detailed in the Environment Agency Guidance Document – *Fire Prevention plans: environmental permits* published 29 July 2016 and updated 9 January 2020.

2.0 Scope and Objectives

This Fire Prevention Plan is applicable for Humberside Blocks (2012) Ltd, Ellifoot Lane, Burstwick, Hull, HU12 9EF.

The fire prevention measures in this plan have been designed to meet the following objectives:

- Minimise the likelihood of a fire happening
- Aim for a fire to be extinguished within 4 hours
- Minimise the spread of fire within the site and to neighbouring sites.

3.0 Management responsibilities

3.1 Site management

- Ensure the effective implementation of the Fire Prevention Plan;
- Allocate sufficient resources to ensure that the Fire Prevention Plan can be implemented;
- Monitor the overall effectiveness of the Fire Prevention Plan through regular site inspection and site operative liaisons;
- Regularly update the Fire Prevention Plan as required and carry out an annual review.

3.2 Site operatives

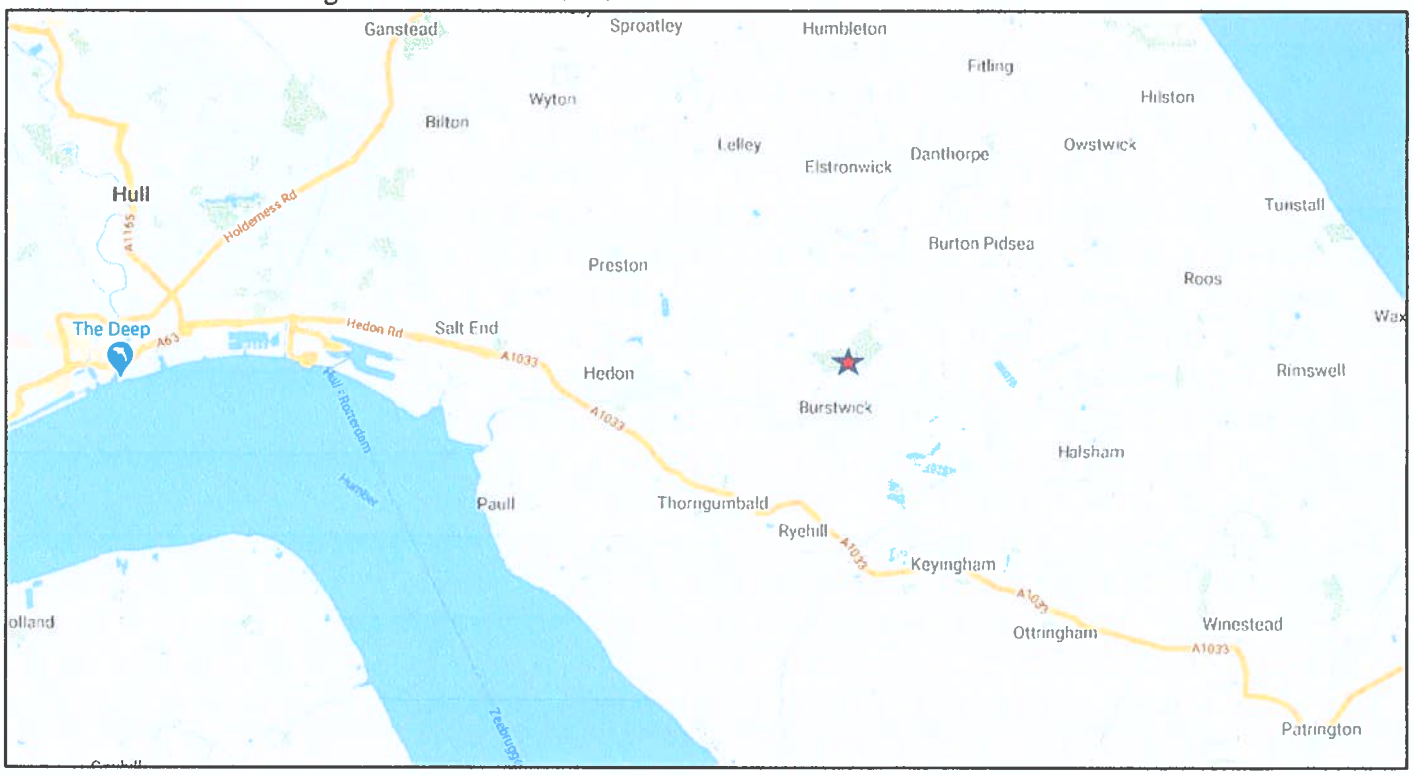
- Follow operating instructions and report discrepancies between these instructions and the work;
- Maintain the fire prevention controls implemented by Humberside Blocks Ltd (as detailed in this plan);
- Report any activities or events that could jeopardise the fire safety strategy.

4.0 The Site

4.1 The Site Location

The site is located off Ellifoot Lane approximately 550 metres to the north of the village of Burstwick and 15.5 kilometres east of the city of Hull. The site entrance is located off an unpaved road off Ellifoot Lane as shown on plan No. HB/EMS/01, served at OS map reference TA 22920 28701. The immediate surrounding areas are comprised of industrial units, and a golf course as shown by the red star in Figure 1 below.

Figure 1: Location of the site

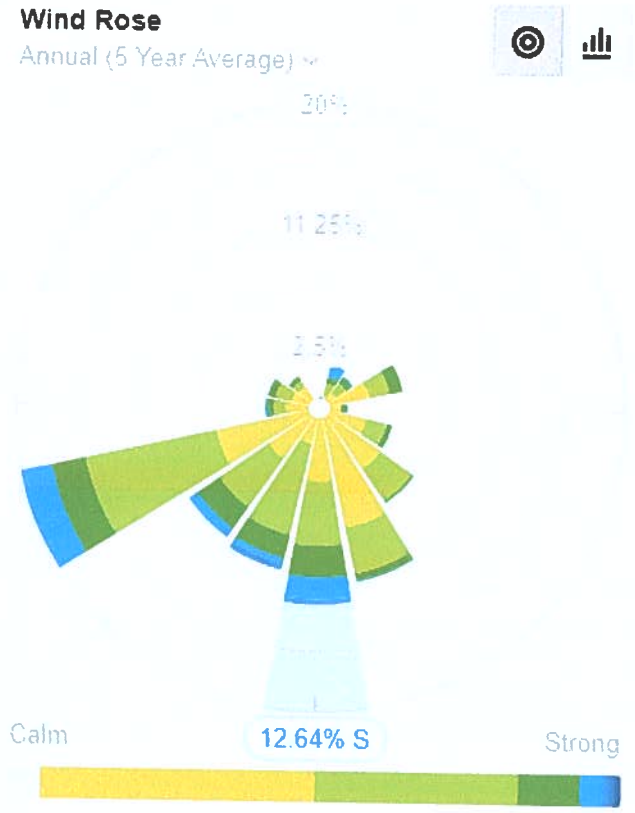


4.2 Local receptors

The site is within a predominantly rural location and consequently there are few sensitive receptors within a 1 km radius of the site, however, the following key receptors have been identified:

- Residential property located 430 metres to the South of the site and extending to the 1km limit;
- Burstwick Community Primary School located 720 metres to the South of the site;
- Burstwick Country Golf Club located 320 metres to the East of the site;
- East Carr Drain situated adjacent to the site to the North East;
- Burstwick Drain situated adjacent to the site to the West;
- Industrial premises situated adjacent to the site to the South, East and West;
- Isolated farm building located 845 metres to the West and 760 metres to the North of the site;
- The B1362 located within 60 metres to the South East of the site.

These local receptors would be impacted by a fire on site, however, the prevailing wind direction is west south westerly (as shown by the wind rose for Hull below) thus reducing the likelihood of impact of air emissions on those receptors located to the south and west of the site.



The plan below shows the location of these sensitive receptors in relation to the site, the location of which is indicated by the red arrow. The numbers on the plan correspond to the following receptors:

1. Residential property located 430 metres to the South of the site and extending to the 1km limit;
2. Burstwick Community Primary School located 720 metres to the South of the site;
3. Burstwick Country Golf Club located 320 metres to the East of the site;
4. East Carr Drain situated adjacent to the site to the North East;
5. Burstwick Drain situated adjacent to the site to the West;
6. Industrial premises situated adjacent to the site to the South, East and West;
7. Isolated farm building located 845 metres to the West and 760 metres to the North of the site;
8. The B1362 located within 60 metres to the South East of the site.

5.0 Site activities

5.1 Permitted activities

This Fire Prevention Plan accompanies an application for waste treatment permit to allow the processing of material currently stored on site and the importation of other waste streams to be used in the block making process.

5.2 Other non-permitted activities

As well as the permitted activities above the site also stores potentially flammable liquids that could pose a fire risk. The location of the storage areas for these non-permitted substances are shown on the attached plan Ref. HB/IR/FPP/01, site layout plan.

6.0 Managing common causes of fire

6.1 Arson

The permitted area is surrounded by a mixture of fencing, walling, bunds and water filled drains. At the southern end of the site stone and wooden fencing barriers prevent access and fencing has been erected between the site and all other surrounding industrial premises. Access from the golf course is prevented by the Burstwick Drain to the north west and the East Carr Drain to the north east.

The entrance gate is made up of 2.1 metre high metal paling fencing topped with spikes. The gate is padlocked closed at all times when the site is not operational. This is the only vehicular access to the site

Site boundary checks are completed weekly to ensure the site security is maintained and the risk of arson reduced.

The site has 24 hour CCTV coverage with cameras covering the yard areas. The cameras are monitored from the site office during working hours and can be monitored 24 hours a day by members of staff from mobile phones.

6.2 Plant and equipment

The only mobile plant used on site as part of the daily waste operations are loading shovels. Static plant and equipment, for example crushing, screening and sorting machines are located predominantly on the new concrete pad to the east of the site and are marked on the attached drawing HB/IR/FPP/01.

Site maintenance activities are performed in accordance with operating procedures. The operators understands the importance of routine preventative maintenance. In summary, the following provisions are implemented:

- Plant maintenance schedules using the manufacturer's recommendations where vehicles are serviced after 500 hours of operation;
- Pre-use checks are completed prior to using plant and equipment daily;
- Defects are reported and actions taken based on priorities;
- All plant and equipment is visually inspected by the operator at the end of the working day for the purposes of identifying fire risks;

- Throughout the day operators are vigilant in checking vulnerable areas like exhausts and engine bays;
- Specialists contractors are used to perform maintenance outside the scope and expertise of the site management and operatives;
- All plant and equipment undergoes a thorough examination by independent insurers every 6 months as a minimum.
- All documentation relating to plant and equipment maintenance is retained in the site office for inspection.

All mobile plant have fire extinguishers in them and extinguishers are available on site should a small fire require fighting by site staff.

6.3 Electrical faults

All electrics on site, are installed by a fully qualified electrician. All portable electric appliances are PAT tested annually and certified by a fully qualified electrician. All installation and testing documentation is retained in the site office for inspection.

6.4 Discarded smoking materials

No smoking is permitted on any part of the site.

6.5 Hot works

Oxy acetylene cutting currently takes place on site with the equipment being stored in the shed adjacent to the site car park as shown on the attached plans. No cutting takes place within the vicinity of any of the buildings on site or within 6 metres of any waste pile or site boundary.

6.6 Industrial heaters

This site does not use industrial heaters and these therefore cannot be a cause of fire.

6.7 Hot exhausts

While plant and equipment is in use throughout the working day and exhausts and engine bays inevitably heat up regular housekeeping takes place daily and operators continually and vigilantly monitor for potential fire risk situations.

At the end of the day mobile plant is parked away from the waste piles where possible. Checks are made by site management on all items of plant and equipment to ensure that they do not pose any fire risk prior to closing the site for the day.

6.8 Ignition sources

Sources of ignition have been assessed and reduced as far as reasonably practicable. Remaining ignition sources have been identified and controlled as follows:

Smoking is not allowed on any part of the site.

Hot works in the form of cutting of metal are controlled and take place away from any building or potentially flammable waste pile.

All portable electrical appliances are PAT tested annually and certified by a fully qualified electrician. Electric lights are insulated.

There is a potential for sparks as plant regularly comes in contact with metal and concrete surfaces. The general housekeeping however makes fires from this source unlikely.

6.9 Batteries in end of life vehicles

The site does not accept end of life vehicles, nor is it permitted to do so.

6.10 Leaks and spillages of oils and fuel

Every attempt is made to prevent fuels and combustible liquids leaking or trailing from vehicles on site. Spill kits in the form of absorbent granules are located within the site buildings.

Should a spill occur staff are instructed to use the absorbent granules to cover the liquid and then clear up and place the contaminated material in a container awaiting removal from site to a suitably permitted facility for disposal. Spill kits are located in the site office and the washing shed.

6.11 Build-up of loose combustible waste

The site is visually inspected and cleaned daily to prevent the build-up of fragments that could cause slipping and tripping hazards. This also serves to prevent damage or punctures to vehicles using the site. As part of this process loose combustible waste is collected and stored awaiting removal from site.

The nature of the site is such that very limited amounts of loose combustible material are ever found within the permitted area.

6.12 Reactions between wastes

It is difficult to imagine any reaction between the types of waste accepted at the site, however, every load is inspected both as it arrives on site and when it is unloaded. If an adverse reaction has occurred in transit, then this would become apparent and necessary steps could be taken to deal with the situation. The site has a designated quarantine area where material can be isolated and dealt with accordingly.

6.13 Deposited hot loads

The waste acceptance procedure at the site ensures that every load is checked before it is unloaded and further checks are made when the material is cleared to be off-loaded (see waste acceptance in section 8.1). Under these circumstances, it is highly unlikely that a 'hot load' would be accepted on site.

Should such an eventuality occur and a hot load is deposited on site the material would be immediately moved to the quarantine area where site staff would monitor or deal with the situation as necessary under the guidance of site management.

7.0 Preventing self-combustion

7.1 Managing storage time

On a daily basis all storage piles are visually inspected by the site manager for any anomalies, such as visual signs of heat, steam and vapour. Anomalies are actioned immediately by investigation and remedial action will be taken such as rotation of the material or damping down as deemed necessary.

Due to the nature of the business, site operators are located within the yard areas for the majority of the working day, they continually and vigilantly monitor the condition of all the processes for potential fire risk situations.

Storage time for waste materials is kept to a minimum where possible and it is not anticipated that waste will remain on site for more than six weeks before it is processed or removed from site.

7.2 Monitoring and controlling temperatures

In order to mitigate the risk of fire the company will undertake regular monitoring of the material stockpile with a RayTemp 8 infrared thermometer. This equipment is designed to monitor temperatures within the stockpile. The RayTemp 8 infrared thermometer has a socket which allows a thermocouple probe to be attached allowing temperature measurements to be taken up to two metres within the stockpile.

Monitoring of the temperatures will be documented and records will be available in the site office for inspection as required. Temperature readings will be taken daily at 10 separate points within the pile.

Should elevated temperatures be detected (>60 degrees Centigrade) then the stockpile will be damped down using a bowser. Should these elevated temperatures persist then the stockpile will be excavated in order to determine the source and the location of the raised temperatures and action taken to deal with any problems detected.

The mixed nature of the material currently on site means that there is a potential pollution risk to the environment from fire. Plastic, in particular, is generally accepted as combustible. The material has, however, been in situ since 2014 and during this time has not exhibited any signs of being a fire risk. Even during the hot summer of 2018 significantly elevated temperatures were not detected in the pile.

Out of hours, CCTV covers the whole yard and this can be remotely monitored so signs of a fire on site would be identified quickly, site management would be notified and the emergency services contacted.

7.3 Waste bale storage

No bales are stored on site.

8.0 Managing waste piles

8.1 Waste acceptance

All waste arriving on site, irrespective of the carrier, undergoes an initial inspection of the load by site personnel.

When the material has been accepted, the driver is directed to off load the vehicle in the appropriate area of the site. As the vehicle is unloaded site staff re-assess the material to ensure that there is nothing in the load that does not comply with the site permit. At this stage, they also check to ensure that the load is not hot or present any fire hazard. Non-permitted items are either loaded back onto the vehicle to be taken away or placed in the quarantine area awaiting further assessment.

8.2 Waste pile size

The height of stockpiles of material at the site is kept to a minimum wherever possible.

The largest waste pile size is the in-situ material awaiting processing. As a large proportion of the area where this material is currently stored will be concreted and drained to be used as a material processing area the pile will be moved and separated.

The separation process will split the material up into smaller piles with six metres distances between individual piles.

The largest pile of in-situ material when the material has been moved will be limited to 675 cubic metres (15m x 15m x 3m).

There will be several piles of this size. The in-situ material is the only waste stream which is covered by this fire prevention plan.

8.3 End of life vehicles

The site does not accept, nor is it permitted to accept end-of-life vehicles in any form.

8.4 Waste stored in containers

The only waste material stored in containers is the residual waste that is to be removed from site. This waste stream is contained within a skip located close to the site entrance and a significant distance from the waste piles.

9.0 Preventing fires spreading

9.1 Separation distances

Significant separation distances are maintained on site between individual piles of material. This is aided by the very large site area

There is at least a 6 metre separation between potentially combustible liquids and any piles of waste or other hazards. Individual waste piles are separated by at least a six metre buffer zone.

9.2 Fire walls and bays

There are no fire walls or bays on this site currently. When the material currently on site has been processed, or more of the site is covered with an impermeable pavement then bays constructed of giant 'lego blocks' may be constructed to house waste material that will be incorporated into the block making process. Should bays be constructed then this plan would be updated and sent to the Environment Agency for their consideration and incorporation into the environmental permit for the site.

10.0 Quarantine area

The quarantine area for this site is in the yard area adjacent to the site entrance. There is sufficient space to store all of the combustible waste material on site in this area while still allowing access to all areas of the yard for site staff and the emergency services.

There is a separation of at least six metres between the quarantine area and the site perimeter as well as any other individual waste piles.

The quarantine area is rectangular in shape. To work out the area of a rectangle multiply the length by the width. The rectangle is 100 metres long by 40 metres wide.

The quarantine area is therefore approximately 4000 square meters. As the largest waste pile has a base of 225 square metres the quarantine area is more than adequate to hold 50% of this largest pile.

11.0 Detecting and suppressing fires

11.1 Detecting fires

The site has 24 hour CCTV coverage with 12 cameras monitoring both the inside of the buildings and the yard areas. Out of hours the cameras can be monitored remotely via mobile phones. All waste piles within the site are covered by these cameras and a fire would be quickly detected.

During operational hours the site has a staffing level such that any fires would be quickly detected and remedial action could be taken if necessary.

Any fire on site would be considered an emergency and the fire service would be contacted as a matter of course.

11.2 Suppressing fires

The designated incident controller, when appraised of a fire on site shall ensure:

- The emergency services are notified of the incident;
- Site senior management and technically competent managers are notified of the incident and requested to attend site if out of hours;
- The interceptor shut off valve is closed to avoid fire water flowing into the adjacent drain..

Fire extinguishers are available within the buildings in the unlikely event that a fire occurs. Small fires can also be dealt with using the sites own mains water.

12.0 Dealing with a fire on site and the aftermath

12.1 Firefighting techniques

In the event of a fire the most senior member of staff on site would act as incident controller to deal with the situation.

To prevent an incident escalating and to reduce the spread of fire, there is a possibility to move unburnt material with the machines to an alternative area of the site, preferably the quarantine area. The initiation of this action would be taken by the incident controller and would always consider the safety of the employees. The assessment as to the feasibility of moving unburnt material would consider

- The safety of the operator inside the machine;
- The direction of the smoke;
- The heat of the fire;
- The means of escape for the operator;
- The likelihood of the machine catching fire due to radiated heat.

In the case of a small fire there is the option of using one of many fire extinguishers placed around the site to attempt to bring it under control. Again, the factors relating to the health and safety of the operatives must be taken into account and at no point should a site operative compromise his health and safety.

12.2 Water supplies

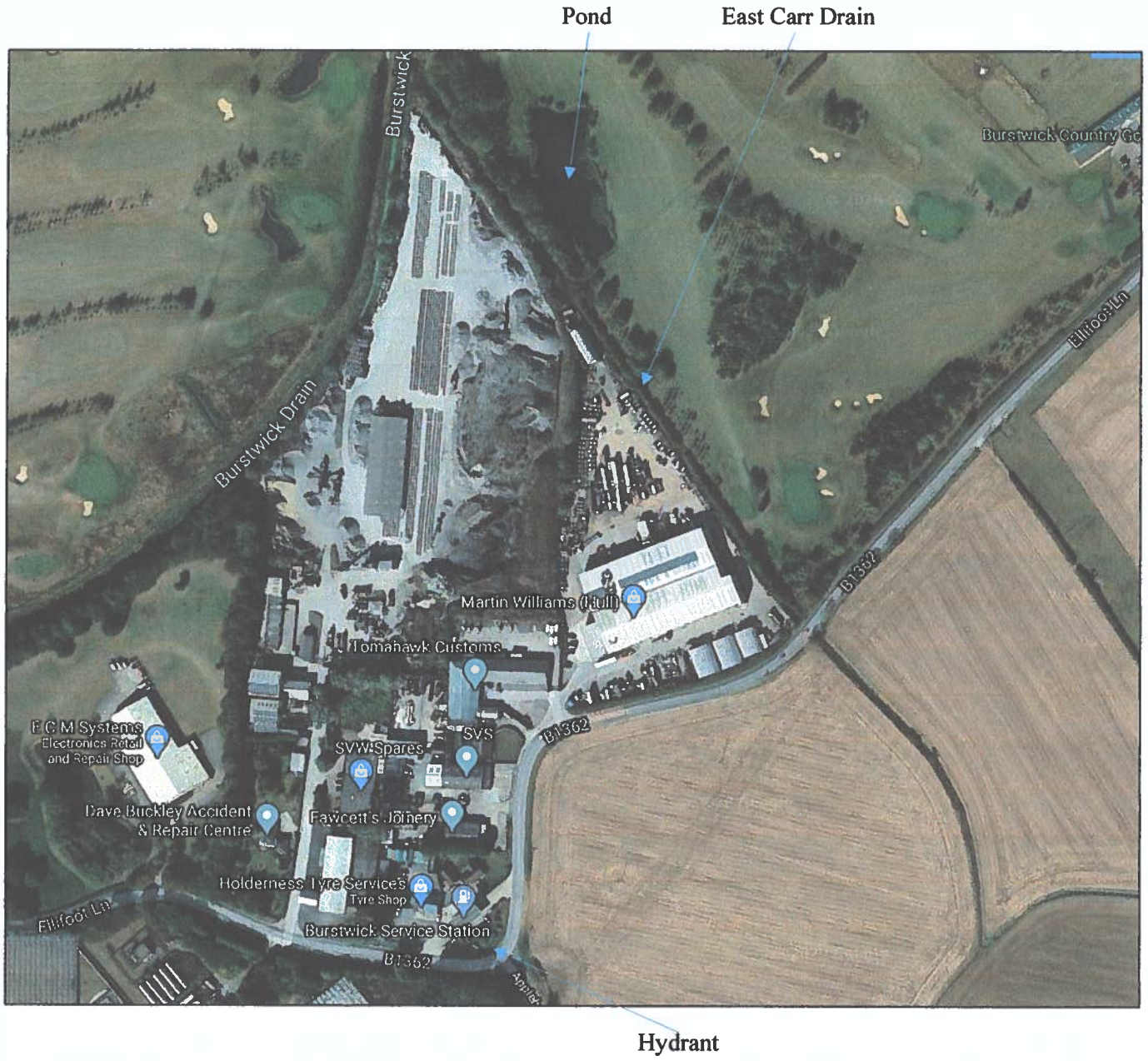
The nearest fire hydrant is located adjacent to Burstwick Service Station on Ellifoot Lane some 400 metres from the location of the largest pile of in-situ waste material. The location of the hydrant is shown on the plan below.

Humberside Fire and Rescue Service have confirmed that the hydrant on Ellifoot Lane can deliver water at 1800 litres per minute. This equates to a total of 324,000 litres over a three hour period.

The site has a mains water supply with a flow of 12 litres per minute and a water pressure of 1.5 bar. While this is inadequate to deal with a significant incident on site it can be used to deal with small fires. In addition to mains water as an initial fire-fighting technique a fire engine also holds 1365 litres of water

Burstwick Drain and East Carr Drain are adjacent to the site to the east and west and there is also a pond associated with the golf course within 50 metres of the north eastern boundary, water can be abstracted from these sources by the emergency services.

The largest waste pile on site, in-situ glass and associated contaminants, has a maximum volume of 675 cubic metres. Fire prevention guidance states that a water supply of 4,500 litres per minute for 3 hours is sufficient to deal with a waste pile of 675 cubic metres in volume. Therefore, a maximum of 810,000 litres of water would be required to deal with a fire in the largest pile. This would be supplied by water from the hydrant on Ellifoot Lane and the adjacent drains and pond.



12.3 <u>Managing fire water</u>

While the bulk of the material currently stored on site will be stored on the concrete pad prior to being processed some material will be retained on the remaining hardstanding. As a consequence it will not be possible to capture all fire water on the site.

The in-situ material is predominantly made up of glass and plastics. It is not anticipated that fire water used to extinguish a fire in this waste stream would become contaminated enough to affect the groundwater in the area. There are no boreholes within 50 metres of the site that are used to provide water for human consumption.

Monitoring of groundwater quality will be undertaken following a fire (see 12.4 below).

Fire water captured by the drainage system surrounding the concrete pad will be allowed to pass through the interceptor and discharge to the drain. In the event of a fire an absorbent boom and absorbent pads would be placed around the discharge point to

capture any contaminants that were discharged. The placement of these items would be the job of the site manager. Booms and pads are stored in the site office.

12.4 During and after a fire

In the event of a fire at this site incoming vehicles would be diverted to other facilities outside the control of the permit holder in the Humberside area and continue until such time as it is deemed acceptable to recommence waste acceptance at the site.

In the event of a fire, site staff will be made available to contact local residents and businesses to make them aware of the situation. Deployment of staff will be at the site management and emergency services discretion. Should evacuation of the surrounding area be necessary then site staff would be in place to assist this process as well as to provide site specific information to the emergency services.

The Environment Agency will be informed of any fire on site within 4 hours of the incident.

Following any incident any fire damaged waste will be removed from site for handling and processing at another site. Any fire damaged property will be repaired or removed from site as necessary. Any clearance of debris from the site, including clearance of access routes will be undertaken before the site is declared fit for operation again. The interceptors will be emptied, and the contents removed for treatment at a suitably permitted facility. The site will not re-open without the agreement of the Environment Agency and the fire service.

Following a fire on site daily monitoring of groundwater will be undertaken by the permit holders to ensure that fire water has not adversely affected the groundwater quality. This daily monitoring will continue for two weeks after the fire and subsequently at weekly intervals for six months after the incident. Groundwater testing results will be made available to the Environment Agency upon request.

13.0 Staff training

All site staff are trained in the site operating procedures, maintenance procedures, the use of fire-fighting equipment and emergency plans, including this fire prevention plan.

Refresher training and updates are given to site staff as and when required and the effectiveness of the training is tested through six monthly fire drills.

All training is documented, and the records are available for scrutiny on site. Each member of staff has their own training record where specific training sessions are documented.

14.0 Continual Improvement

Humberside Blocks (2012) Ltd are dedicated to continually improving site operations through investment and modification in staff and infrastructure. This Fire Prevention Plan is due for review before the end of August each year. The next review is to be carried out prior to 31 January 2022. Any amendments made to this plan will be sent to the Environment Agency for their consideration and incorporation.

Drawing No. – HB/IR/FPP/01 Site layout plan