

**Report No.MS1005/9/NTS
Date: August 2009**

**MATERIALS RECYCLING FACILITY
MORLEY STREET, HULL**

NON-TECHNICAL SUMMARY

**Prepared for
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MORLEY STREET, HULL**

NON-TECHNICAL SUMMARY

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EXECUTIVE SUMMARY

The Materials Recycling Facility (MRF) at Morley Street is a sustainable waste management facility which will divert waste from landfill by increasing recycling and recovery rates and will create in excess of 70 new jobs.

The MRF will be developed on part of the former Holliday Pigments works which closed in 2007 and will operate to serve local businesses.

The MRF will recycle material that would otherwise have been disposed to landfill effectively removing approximately 95,000 tonnes of material from the 'waste stream'.

The development of the MRF will provide the following environmental benefits to Hull and the surrounding area:

- Reducing the amount of waste landfilled;
- Increasing recycling;
- Encouraging waste minimisation;
- Providing infrastructure for Hull to become more self sufficient in terms of waste management; and
- Reducing CO₂ emissions and thus reducing the impact of Climate Change.

The MRF has been designed to meet with the requirements of the Waste Hierarchy, which is a framework designed to encourage sustainable waste management. The facility will accept a total of 125,000 tonnes of waste per annum for recycling.

The development of the MRF is the first phase of the re-development of the former Holliday Pigments site. It is the applicant's intention to develop the former works site into an integrated waste management facility offering a range of treatment options for the various waste streams.

This Non-Technical Summary (NTS) presents in a simplified form, the results of a detailed Environmental Impact Assessment (EIA) of the potential environmental effects arising from the development of a Materials Recycling Facility at Morley Street, Hull. The Environmental Statement (ES) accompanying the planning application reports on the Environmental Impact Assessment undertaken in respect of the proposal and provides further details of the development.

The table below presents a summary of the predicted residual environmental effects of the proposed development. Further details of the assessment and results are provided in the Environmental Statement.

| | Development Phase | Summary of predicted effects |
|-------------------------------|-------------------|--|
| Hydrology & Hydrogeology | Construction | Surface Water Runoff/Flooding – Impacts considered to be negligible . Surface Water Quality – Impacts considered to be negligible Groundwater Quality – Impacts considered to be negligible |
| | Operational | Surface Water Runoff – Impacts will be moderate beneficial Surface Water Quality – Impacts will be negligible Groundwater Quality – Impacts will be negligible |
| Ecology & Nature Conservation | Construction | Bats – Considered to be neutral impact Amphibians – Considered to be neutral impact Reptiles - Considered to be neutral impact Badger – Considered to be neutral impact Birds – Considered to be neutral impact Voles - Considered to be neutral impact Flora – Impact considered to be neutral impact |
| | Operational | All fauna – Impacts considered to be negligible Birds – Impacts considered to be negligible |

| | | |
|--------------------------------------|--------------|---|
| Highways & Transport | Construction | Highways Capacity – Impacts considered to be negligible Highways Safety – Impacts considered to be negligible |
| | Operational | Highways Capacity – Impact considered to be moderate beneficial Highways Safety – Impact considered to be moderate beneficial |
| Contamination, Soils & Geology | Construction | The construction phase will have little disturbance below surface |
| | Operational | The operational phase will have little disturbance below surface |
| Noise & Vibration | Construction | Noise – Impacts considered to be negligible Vibration – Impacts considered to be negligible |
| | Operational | Noise – Impact considered to be negligible Vibration - Impacts considered to be negligible |
| Air Quality | Construction | Dust - Impacts considered to be negligible Vehicle emissions - Impacts considered to be negligible |
| | Operational | Vehicle Emissions – Impact considered to be minor beneficial Global Warming – Impact considered to be minor beneficial |
| Visual Landscape | Construction | Visual Impact – Impacts considered to be negligible to minor Landscape Character - Impacts considered to be negligible to minor |
| | Operational | Visual Impact – Impacts considered to be minor beneficial Landscape Character – Impacts considered to be negligible |
| Socio-Economic | Construction | Employment – Impacts are considered to be moderate beneficial Population – Impacts are considered to be negligible Sustainability – Impacts are considered to be negligible Local Economy – Impacts considered to be moderate beneficial |
| | Operational | Employment – Impacts considered to be moderate beneficial Population – Impacts considered to be negligible Sustainability – Impacts considered to be significant beneficial Local Economy – Impacts considered to be moderate beneficial |
| Land Use | Construction | Impacts are considered to be negligible |
| | Operational | Impacts are considered to be minor beneficial |
| Archaeology & Historical Environment | Construction | Impacts are considered to be negligible |
| | Operational | Impacts are considered to be negligible |

Mytum and Selby's website has been designed to provide information on the proposal, and seek comment and involvement from the local community. Details can be found at the following address:

www.mytumwasterecycling.com

NON-TECHNICAL SUMMARY

INTRODUCTION

This Non-Technical Summary (NTS) presents in a simplified form, the results of a detailed assessment of the potential environmental effects arising from the development of a Materials Recycling Facility (MRF) at Morley Street, Hull. The location of the proposed MRF is shown on Figure NTS1.

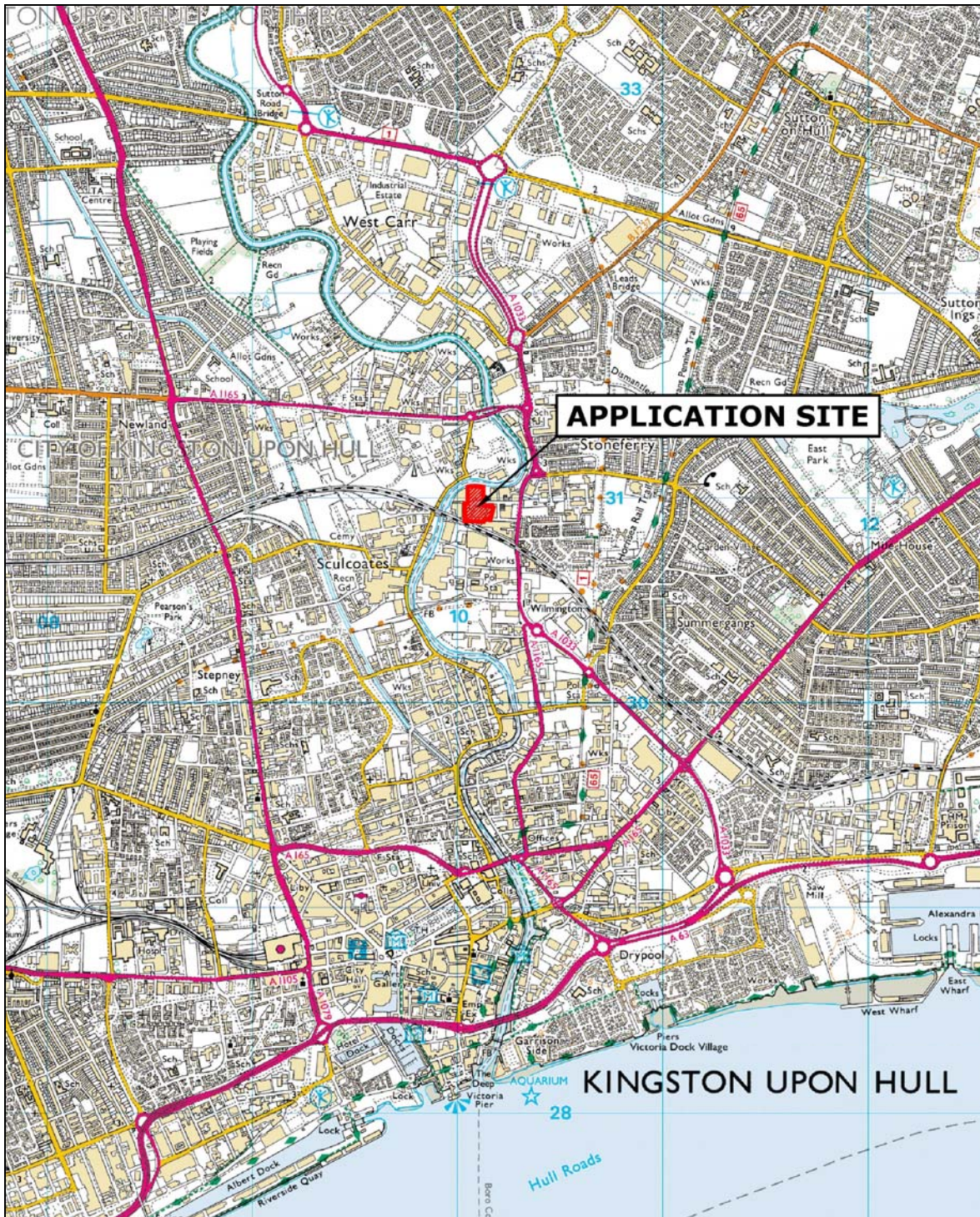


Figure NTS 1: Location of site development

The submission of a detailed planning application has been made by Mytum and Selby Waste Recycling Limited (the applicant) to Hull City Council, the Waste Planning Authority. The planning application consists of a Planning Statement (incorporating the Design and Access Statement), Environmental Statement and Non-Technical Summary.

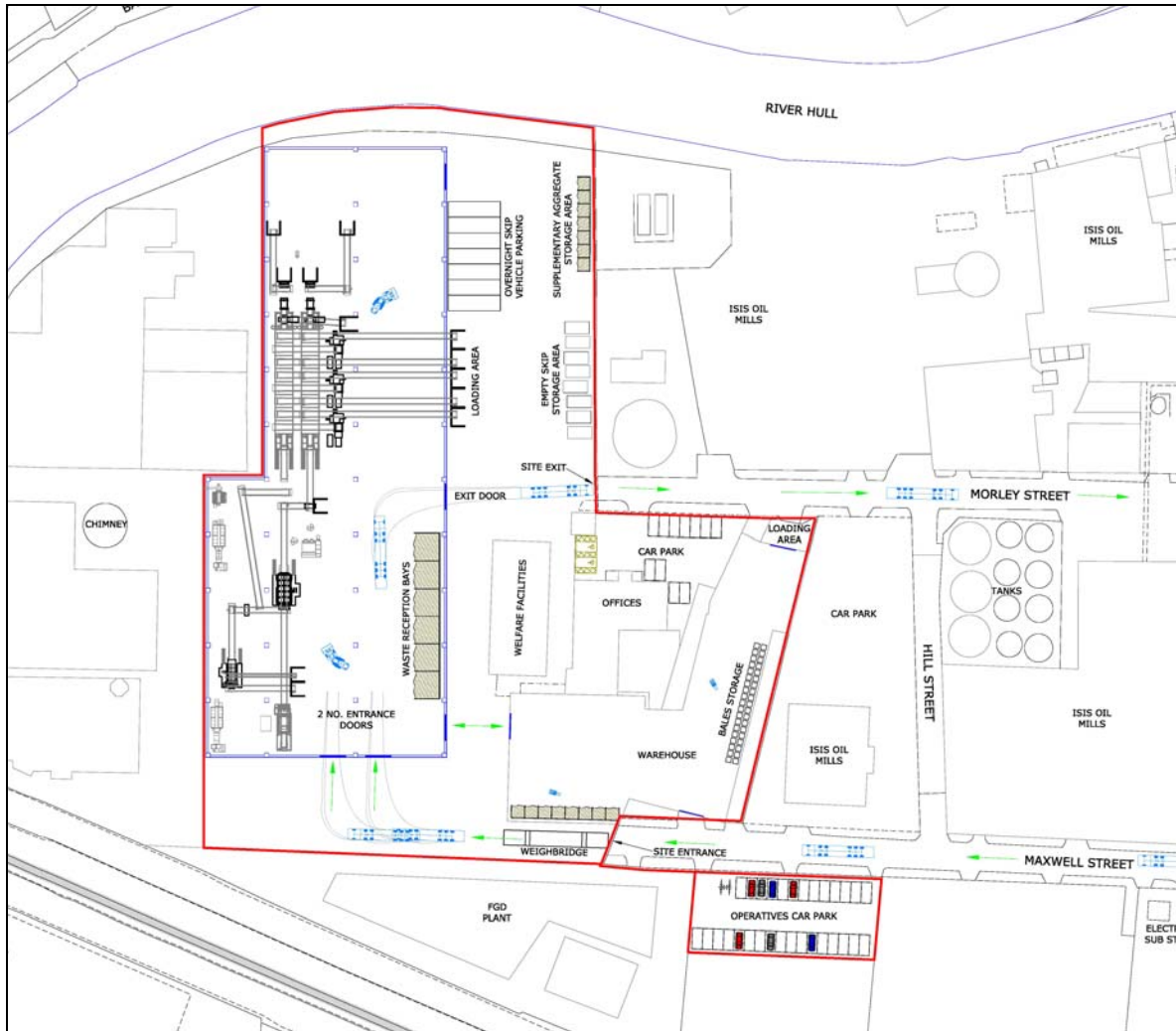


Figure NTS 2: Proposed Site Layout

Materials Recycling Facility (MRF) – What is it?

When people and businesses throw rubbish away there is usually a wide range of materials in a skip or bin that has the potential to be reused or recycled. A MRF will sort and separate the various discarded materials into similar types, such as paper, plastics, metals and textiles. The sorted materials can then be sent to be recycled at specialist reprocessors, or if the material cannot be recycled then it can be sent for further treatment or disposal. Although dependent on the nature of waste materials, up to 75% of the material received at the MRF can be re-used or recycled.

The MRF has been designed to conform with the most widely accepted model of managing waste. This is known as the Waste Hierarchy. The intention of the waste hierarchy is to encourage behaviour that is sustainable and that waste should be minimised at source through minimisation or reuse, ensuring that what waste is produced can be composted or recycled or have energy recovered from it, with landfill being the option of last resort.

The MRF has been designed to compliment the Waste Hierarchy and in so doing creates sustainable jobs. All the jobs created at this development will by definition be new. The facility represents a new generation of development much needed not only in the Hull area but also in the local economy.

Why we need it?

The reality of our dependence on fossils fuels and our unsustainable consumption of the earth's natural resources have long been understood. However, it is not until recently that they have started to impact on every day life. These and climate change issues dominate the news headlines wherever you look.

Each year in the UK we throw away 70 million tonnes of rubbish. Half of this (circa 39 million tonnes) is produced by businesses supplying us all with the things we need.

In 2005 Hull managed a total of approximately 1.35 million tonnes of commercial and industrial waste and in same year the Yorkshire and Humber Region produced approximately 10,496,000 tonnes of construction and demolition waste.

In 2010 it is estimated that there will be a need for 877,000 tonnes of treatment (non-landfill) capacity for commercial and industrial waste. There is already circa 230,000 tonnes of existing annual treatment capacity in Hull. If Hull was to manage its commercial and industrial waste beyond what is permitted to be sent to landfill in 2010 it would need an additional annual treatment capacity of 647,000 tonnes. There will also be a significant amount of waste material from the construction and demolition sector, an amount which is not been accounted for.

The waste thrown away has taken many resources to extract or grow, refine or package and transport for sale in shops. Therefore it is not just the product, packaging or food we have wasted but all the energy used to create the goods in the first place that we need to recover as well. Put simply, we are throwing away the very things that could be recycled to make new products

Environmental Impact Assessment

Mytum and Selby Waste Recycling Ltd commissioned environmental consultants ENCIA Environmental to undertake an EIA of the proposals. The findings of the assessment are presented in an ES which accompanies the planning application, as required by the *Town and Country Planning (Environmental Impact Assessment) (England & Wales) Regulations 1999*.

The purpose of the EIA is to identify how the surrounding environmental resources and people (collectively known as receptors) could be affected by the development proposals and to put forward measures (often referred to as mitigation) that will avoid, minimise or offset any negative effects.

To achieve this, the ES has been prepared following a scoping exercise, involving Hull City Council Planning Authority, statutory consultees and other key organisations. Specialist consultants in a wide range of disciplines have been employed to carry out environmental studies and assessments. Details of the independent studies and assessments are contained in the ES. This NTS document provides a summary of the key findings and conclusions of the EIA process.

THE SITE

Why the former Holliday Pigments works?

There are a number of features that are required when considering the location of a MRF. The site should preferably have an industrial past and setting, the development needs to be close to its market, the site needs to be located in an area where there is an available skilled workforce and the location needs to comply with planning policy.

Industrial Past

The proposal site is part of the wider Holliday Pigments works which began life in 1884 when Reckitt & Sons began the manufacture of ultramarine, a synthetic pigment used in paints, packaging and cosmetics. Recent history includes the commissioning of a flue gas desulphurisation plant in 2000 where instead of sulphur dioxide emissions going into the atmosphere waste gases are condensed into high quality sulphuric acid, which was sold to other industries. In September 2007 Holliday Pigments moved operations from the Hull site to an additional facility in Northern France.

Prior to closure, the works comprised up to eleven separate buildings and a very large chimney. Five buildings, located centrally within the works, have already been demolished and removed from site. The remaining buildings/structures include the kiln houses, chimney, warehouses, offices, and flue gas desulphurisation plant and control room.

Proximity to Market

A fundamental principle of sustainability is proximity. This principle seeks to ensure that activities are carried out close to the markets they serve and are limited in scale to represent the local community; the principle seeks to reduce vehicle transport and allow convenient access to the development by the workforce.

Hull is a significant urban settlement within the Humber Region. As such it produces significant waste streams from the businesses which serve this population. Locating a facility in the market it serves, such as the significant industrial areas along the River Hull and the Humber Estuary stops waste being transferred out of the area for disposal, contributing to the reduction of greenhouse gases from transportation and recycling.

The Joint Waste Local Plan highlights that to meet its targets new facilities that reduce dependency on landfill are needed. The emerging Hull Development Framework is also expected maintain this stance with a view to sustainable waste management.

Available Skilled Workforce

The administrative area of Hull City has a population of around 243,589 and subsequently a large employment base. However, the historical decline of primary and manufacturing/engineering jobs (although offset by the service industry employment) has led to higher than average unemployment (nationally).

The MRF will need employees that reflect the full spectrum of employment. The jobs from the MRF will include operator shift staff, maintenance employees, weighbridge operators, clerical and administrative staff and facility management staff. A key reason for selecting Hull for the development of a MRF is the availability of the workforce and the historical pre-disposition to manufacturing and engineering.

Planning & Policy

The MRF is clearly a major development which may attract public interest. To ensure that the development is appropriate to the site chosen, a thorough evaluation of current and proposed planning and development policy was undertaken.

Waste Management Planning

A key planning objective requires waste to be managed at the closest appropriate facility to its place of origin and that priority should be given to the re-use of previously developed land. Given the site's industrial location and proximity to a large urban area the site suitable located to meet such requirements.

THE DEVELOPMENT

Introduction

Within the proposed MRF building:

- Tipping area for the reception of waste materials;
- Process line for the sorting, screening, crushing and manual sorting of (picking) and baling of waste materials; and
- Temporary storage of some sorted materials.

Within the existing warehouse/office:

- Storage of processed materials; and
- Use of existing office accommodation and welfare facilities.

External to the buildings:

- A weighbridge;
- Operatives car park;
- Empty skip storage;
- Processed material storage bays;
- Overnight commercial vehicle parking;
- Supplementary storage area for aggregates; and
- Loading area for sorted materials;

The facility will accept a total of 125,000 tonnes of waste per annum. Of this amount is it anticipated that approximately 75% of the waste material imported to the site will be recycled; or circa 95,000 tonnes effectively removed from the waste stream.

Overview

Following authorisation by the weighbridge staff, vehicles will be directed to one of six tipping bays located within the MRF building. Vehicles will enter the building through one of two roller shutter doors located on the southern elevation; these doors will be automatically operated. Once in the building the waste material will be deposited in the relevant bay. The bays will be constructed from concrete push walls or something similar. Vehicles would exit the building through another automated roller shutter door located on the eastern elevation.

Material in the reception area will undergo a crude manual sorting operation to remove large, heavy items which may damage the process line. Such items will be manually broken down and re-entered into the system.

All non compliant/non recyclable materials will be identified by visual inspection upon arrival. In accordance with Duty of Care procedures, all incoming waste materials will meet the acceptance criteria of the Environmental Permit. Non-compliant waste will be quarantined and removed from site.

The Process Line

To sort and separate the materials a number of mechanical and manual operations are included in the MRF. Such operations include trommels, screens, magnets, shredders, air separators and picking stations. These operations are generically referred to as a 'process line' as they are all linked by a series of conveyors. At various points along the process line specific materials are removed from the 'waste stream' until you are essentially left with a residual material that cannot be re-used or recycled.

Recyclable material is either placed in skips or container baskets, or fed into a bailing unit. The bailing unit will compact materials into typically 1m³ bales which are secured by metal/plastic banding. These bales are then transferred to the on-site warehouse prior to onward transportation to specialist materials reprocessors such as glass recyclers.

The MRF will recycle circa 75% of the waste going through the plant. This will be some 95,000 tonnes of material each year that would otherwise have been landfilled and lost forever. There will be over 70 people working in the MRF split over three shifts.

Future Development of the Site

The development of the MRF is the first phase of the re-development of the former Holliday Pigments site. It is the applicant's intention to develop the former works site into an integrated waste management facility offering a range of treatment options for the various waste streams ensuring a 'zero waste to landfill' policy.

Further to this, in partnership with the University of Hull, Mytum and Selby Waste Recycling Ltd propose to develop a higher education/research centre for evolving waste management technologies. This is intended to lead to high value research and commercial 'green collar' jobs and assist in making Hull a regional centre in the carbon economy. The redevelopment of the site will be undertaken on a phased approach, with the MRF and associated operations representing the first phase (the proposal set out in this application). In addition to the development of the MRF, at this stage the following elements to comprise the integrated waste management facility include (in no particular order):

- In-Vessel Composting (IVC);
- Advanced Thermal Treatment (ATT)/Biomass;
- Higher education/research centre;
- Waste Reception Centre for the public (similar to a Household Waste Recycling Centre); and
- River wharf delivery point.

The development of the above facilities will be the subject of separate planning applications in the future.

Building Design

The MRF will be accommodated in a purpose-built facility in line with new modern industrial and commercial style warehouse buildings. The building will be designed to

house the plant and machinery required to operate efficiently and safely whilst having consideration to the surrounding environment.

The steel portal frame building with profile metal cladding and will measure approximately 140 metres by 55 metres (at the widest point) by 12 metres to the eaves (ridgeline 16 metres) giving a usable floor space of 6,739m². The roof will have a single return and is also of profile metal cladding and translucent panels for lighting purposes. The building will be fully enclosed on all four sides.

The elevations as shown in figure NTS3 gives an impression of what the new building will look like. The building will be a mainly a light grey colour incorporating two shades of green.

Discreet external modern down lighting will be used to illuminate the buildings and outside areas. This will help to minimise light pollution and to ensure that the development and buildings are sympathetic to the night time character of the area.

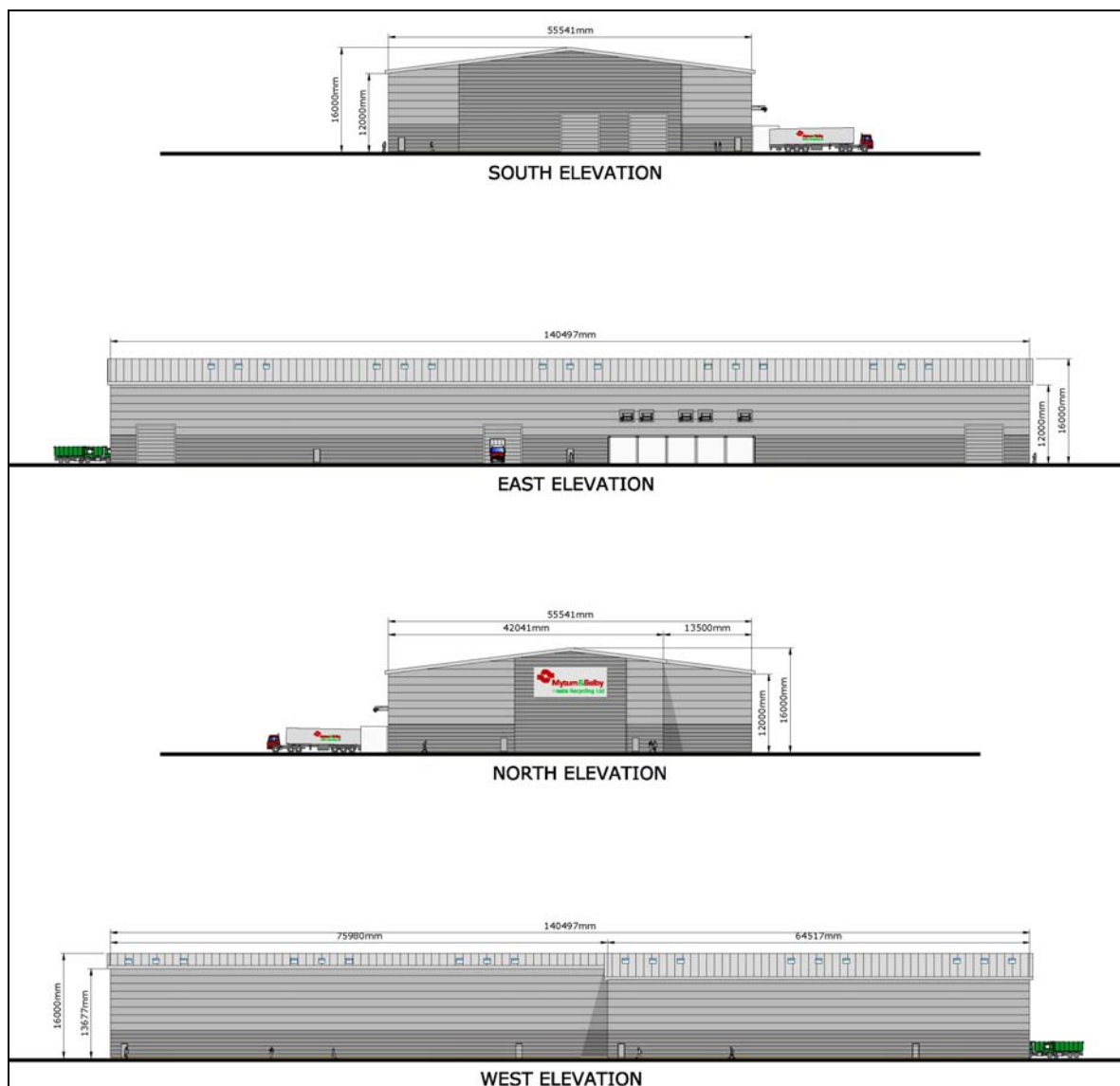


Figure NTS3: Building Elevations

Construction

The estimated programme for the main site activities during the construction phase is as follows:

- Site establishment, groundworks (if necessary)
- Substructure
- Superstructure
- Internal fit out and ancillary development

It is anticipated that the above works will take at least 12 months complete. There will also be 3 month commissioning and start up period.

Ancillary Facilities

As part of the proposed operations the MRF will use an existing warehouse facility located immediately to the east of the new building. This temporarily store processed and baled material prior to export from the site. This proposal will also retain the use of the existing offices and welfare facility.

External but adjacent to the MRF building is a supplementary aggregates storage area, an empty skip store, an overnight skip vehicle park, loading area. A site operative car park is located off Maxwell Street, which can accommodate up to 30 vehicles.

A weighbridge will be provided at the site entrance off Maxwell Street.

Employment Generation

The proposed MRF will result in approximately 70 new employment positions being created, comprising operator shift staff, maintenance employees, weighbridge operators, clerical and administrative staff and facility management staff.

Operating Hours

It is the applicant's intention to operate the MRF 24 hours a day, seven days a week.

The import and export of material to the site will take place during the following times:

Delivery Hours

| | |
|---------------------|--------------------------|
| Monday to Friday | 0700 hours to 1800 hours |
| Saturday and Sunday | 0700 hours to 1300 hours |

On site movements, such as the transporting of recyclables between the MRF and warehouse will also undertaken on a 24 hours basis.

Traffic

All vehicles delivering waste material to the site will be under the ownership/control of the applicant. The commercial vehicles visiting the site will vary in size, ranging from small light goods vehicles to the largest road legal heavy goods vehicle (44-tonne gross weight). However, the majority of vehicles will be skip lorries.

Baled processed material will leave the site in shipping containers, which have a capacity of between 22 tonnes to 26 tonnes. Other processed materials such as inerts, residual waste, shredded timber will leave on the 'backloads' of vehicles importing waste to the site. Collectively, the MRF will give rise to approximately 55 commercial vehicles arriving and departing each working day (110 vehicle movements), with the

majority of movements occurring throughout a full working day. It should be remembered that as the delivery times are reduced over the weekend, the vehicle movements will be also be limited.

In addition to the 110 daily commercial vehicle movements there will also be a maximum of 150 vehicle movements (75 in, 75 out) resulting from site operatives and staff private cars. This figure is a worst case scenario as it is likely that a significant number of staff will either car share or use alternative forms of transport (cycle or public transport, for example).

Access to the site from the wider highway network will be via Stoneferry Road (A1033) which is one of the principal arterial routes servicing Hull in a north/south alignment. From Stoneferry Road the proposal site can be accessed by either Maxwell Street or Morley Street. It is the applicant's intention to operate a one-way circulation system for the MRF and site. Vehicles will enter the former works site off Maxwell Street and leave via Morley Street. From the Maxwell Street entrance vehicles will travel along an internal site road for approximately 50 metres to the proposed MRF building. Vehicles will only be able to leave the operational areas of the site via the existing access/egress point at Morley Street. From Morley Street vehicles will only turn left onto Stoneferry Road.

It is not the applicant's intention to make any significant alterations to the site's access and egress other than appropriate signage.

External Lighting

All recycling activities will be undertaken internally. Due to the design and enclosed nature of the operations within the approved building, it is considered that there will be only limited external lighting to enable safe traffic movements on the operational hardstanding and internal access routes. Hours of working mean the site lighting will be required after dusk, during the winter months (within the permitted hours) to ensure safe working.

An assessment will be made of the additional lighting requirements above what is already on-site. Consideration will also be given to the removal of lighting where it is deemed unnecessary for the operation of the MRF.

Environmental Permitting Regulations 2007

Before the MRF can operate, an Environmental Permit from the Environment Agency under the terms of the *Environmental Permitting Regulations 2007* will be required. The Permit will set out environmental standards for the operation of the plant, mainly relating to control of emissions to the atmosphere. The Permit is, considerably more narrowly defined and technical than a planning permission. It will include requirements for environmental performance and it maybe revoked if the facilities, once built, fail to meet these requirements. As part of the permit issuing process, the permit application is advertised for public comment.

The Permit will specify the waste types and quantities to be accepted at the site. In the event that delivery waste materials are found to contain waste not approved in the Permit, these will be quarantined for subsequent removal to a suitably permitted waste management facility.

SUMMARY OF TOPIC ASSESSMENTS

The remaining section summarise the environmental topic chapters of the Environmental Statement, Volume 1. Each section includes a brief description of the

methodology used to assess potential environmental effects resulting from the proposed development and the ways, if necessary, to reduce such impacts.

HYDROLOGY AND FLOOD RISK

The proposal site is located on the banks of the River Hull. The Environment Agency confirms that the site lies within Flood Zone 3a with a greater than 1% annual probability of river flooding. However, the Hull City Council Strategic Flood Risk Assessment shows that when more accurate modelling is undertaken the application site falls within (PPS 25) Flood Zone 1.

As part of the construction phase there are a number of works which could potential impact upon the water environment. Such works include the re-surfacing of the operational areas, vehicles delivering construction, materials, plant and equipment to site may inadvertently spill oil or fuel which may get washed into local water courses.

Once operational there are a number of potential sources of pollution which could adversely impact upon local hydrology. These include:

- oil or fuel spills from vehicles visiting the site;
- waste debris inadvertently dropped from vehicles; and
- runoff from the waste reception area.

In terms of flood risk considerations the proposed development will not increase the impermeable area of the site, remaining at 100%. Therefore there will be no increase in surface water run off over and above that of the existing site.

The impact of the proposed development has been considered in terms of flooding from land; rivers; watercourses; the sea; groundwater; infrastructure (defences) failure; overtopping and breaches of defences; sewers and from climate change.

As the Hull City Council Strategic Flood Risk Assessment shows the site to lie within Flood Zone 1, there is no significant risk of flooding from watercourses. This takes into account the effects of climate change. Although measures of flood resilience are proposed as part of the development it is not necessary to raise the finished floor levels of the proposed buildings.

It is considered that building regulations will be sufficient to provide protection from overland flow. However, there are a number of measures to further mitigate the flood risk from overland flow in extreme rainfall events.

To take account of the recommendations of the Pitt Review a reduction in surface water run off of a minimum 30% will be implemented as part of the proposal.

The risk of contamination from any hazardous materials that may be found on the site is considered to be mitigated against. In terms of accidental oil and fuel spills these again will be contained and removed in accordance with the Environmental Permit.

The majority of the controls proposed to protect local hydrology as part of the operational phase are a requirement of the Environmental Permit and are covered in greater detail by those regulations.

If the proposed mitigation measures are put in place it is considered that there would be sufficient flood protection over the lifetime of this development. Furthermore, given the proposed measures and good site management procedures it is considered that the proposed facility will not create a significant negative impact on local water quality.

ECOLOGY

The baseline ecology of the site and its surrounds has been reviewed and the character and nature conservation value of habitats and species assessed.

The application site includes the recently cleared space situated in the centre of the former works, the existing offices and warehouses and an open area to the south of Maxwell Street. The site in its entirety has a tarmac and concrete surface on which there is little or no vegetation.

No wildlife or nature conservation sites are identified for the application site by the proposals map of the Hull Local Plan. However, the River Hull is highlighted as an existing urban greenspace and part of a green network. Given the industrial context of the site, the historical use of the former works and the recent decommissioning works undertaken it is considered that the receptors of ecological value will be limited.

The construction and operational phase the proposal has the potential to negatively impact on flora and fauna, through disturbances from noise, dust and point source pollution (principally, surface water drainage).

During the construction and operational phase of the MRF the applicant will employ good site management to reduce excessive noise and dust emissions from the site which may affect any local flora and fauna. Surface waters will be managed in accordance with the Environmental Permit. Due to the enclosed nature of the proposed operations it is predicted that there will be no significant negative impacts to local ecology resulting from the MRF.

TRAFFIC AND TRANSPORT

Consideration has been given to the traffic and transportation impacts and effects associated with the proposed MRF. In the statement the following information has been considered:

- the existing highway network;
- the previous use of the site;
- the likely traffic movements from the development proposal; and
- the impact of the development on the local highway network.

No information on the number of employees or the level of traffic that was generated by the former Holliday Pigments works is available. In this context it is normal accepted practise to draw on information from the TRICS database to establish the likely base levels of flow. The land use category *Employment – Industrial Unit* could have generated significant levels of traffic in the order of 78 trips during the AM peak, 83 trips during the PM peak and 715 trips throughout the day.

Once operational the MRF will generate approximately 110 daily commercial vehicle movements and 150 daily private vehicle movements. The proposed HGV traffic has been calculated using the maximum annual waste capacity and the likely average vehicle size either delivering or collecting waste. Staff traffic has been estimated based upon staff levels and shift patterns.

In terms of peak hour flows, in the AM peak the MRF is predicted to generate 11 arrivals and 5 departures of which 5 arrivals and 5 departures would be commercial vehicles. In the PM peak the proposal is predicted to generate 5 arrivals and 11 departures, of which 5 arrivals and 5 departures would be commercial vehicles. The maximum hourly flow is predicted as 33 movements (15 arrivals and 18 departures) between 0600 and 0700 hours none of which would be commercial vehicles.

The proposed development will result in significant reductions in traffic generation when compared against the previous use of the site in the order of 60 – 67 trips (77%-78% reduction) during the AM and PM peak hours and a reduction of 433 trips (60.5% reduction) throughout the day. The redevelopment proposals are likely to result in benefits in junction capacity and a reduction in HGV traffic when compared against the previous use of the site.

The proposed development traffic is unlikely to be perceived from day to day fluctuations in traffic on the surrounding highway network and generates significantly less traffic than the previous use of the site and as such no additional mitigation is proposed. Based on the information provided and compared to the previous use of the site, the proposed development would realise other environmental impacts such as road safety, road traffic noise and air quality.

Public transport facilities are available for staff and visitors to the site. It is feasible for staff to commute to the application site using alternative modes to the private car. However, sufficient car parking is proposed as part of the MRF development. Secure cycle shelters are also provided.

CONTAMINATION, SOILS AND GEOLOGY

The application site and immediate surroundings have experienced industrial development since the 1880s, largely as a result of the evolution of the Pigments works. Given this legacy, the development of the MRF building will need to take into account the physical influence of the existing on-site structures and the underlying ground conditions.

The proposed MRF building will be developed in a space created by the demolition of five existing buildings. Here the surface is a combination of areas of concrete and tarmac representing the former location of on site roads and internal floors. The use of the existing warehouses, welfare facilities, offices and office car park will be retained. As such there will be little or no disturbance to the ground.

It may be necessary to implement appropriate below ground works to provide a suitable platform on which to construct the MRF building. The nature and extent of the ground works will be informed by the nature of the underlying ground conditions and the influence of the surrounding buildings and structures which are to be retained.

The operational areas of the MRF development site will be sealed and surface water drainage will be isolated and managed as per the Environmental Permit. Subject to the meeting the operating requirements of the Environmental Permit it is expected that there will be limited opportunity for the operational phase of the development to significantly influence existing ground conditions.

It is considered that in principle the construction of a modern industrial type building and the operation of a MRF is acceptable in such a location. Potentially negative impacts on local ground conditions from the construction and operational phases of the development shall be mitigated by the limited disturbance of ground below the surface. During the operational phase potential impacts will be contained and managed, essentially through the requirements of the Environmental Permit.

NOISE AND VIBRATION

The development and operation of the MRF has the potential to create adverse impacts on local amenity through the creation of excessive noise. This section identifies potential noisy operations as part of the proposal, including the

construction/implementation phase; the identification of possible receptors to noise creation; to which proposed mitigation measures will be suggested and an assessment of such controls made.

The application site is located within an extensive industrial corridor which essentially follows the River Hull. Specific land-uses surrounding the site include Isis Oil Mills, a small waste management facility, industrial and warehouse/distribution units. Given this industrial context of the area it is considered that there is an elevated ambient noise climate. The proximity of Stoneferry Road and Bankside will also affect background noise levels of the site.

The closest residential properties to the application site boundary are located on Kathleen Road approximately 145 metres to the east. At the closest point the MRF building is located circa 250 metres from the same residential properties.

The temporary nature of the construction/implementation phase and the industrial setting of the application site suggest that significant adverse effects from noise generation will not be experienced by sensitive receptors. It should be noted that once the MRF building has been constructed, a significant amount of this phase will be spent implementing the process line and making the minor internal modifications to the warehouse and offices. Obviously such operations will be carried out internally and will be subject to development controls such as appropriate working hours.

Potential noisy operations such as the setting down of empty skips and loading of processed material may create short periods of noise above background levels. Vehicle movements to and from the site may also create elevated noise levels.

However, the fact that the majority of operations will be undertaken within the building offer the greatest control over the potential creation of excessive noise. The location and orientation of the building in relation to the surrounding land users will also aid the attenuation of noise, essentially providing an acoustic barrier between the MRF building and the nearest sensitive receptors (250 metres). For external operations the applicant proposes a number of mitigation measures to reduce the likelihood of potential noise nuisances.

AIR QUALITY

Consideration has been given to the likely emissions to air that may result from the development and operation of the MRF. Following discussions with Hull City Council, an assessment of potential impacts to air quality from vehicle emissions associated with the proposal was undertaken. Consideration was also given to the release of fugitive dust from both the construction and operational phases.

The closest sensitive receptor which may experience the negative impacts upon air quality are residential properties on Kathleen Road, the closest of which is approximately 145 metres to the south east of the application site. There are also a number of existing industrial units surrounding the site. The River Hull is identified as an existing urban greenspace and part of a green network.

The scale of groundworks in the construction of the MRF building has the potential to be a source of dust creation, however given the likelihood of made or alluvial ground, which are not prone to dust formation, significant emissions are not expected. Furthermore, dust generation from the on-site movement of vehicles will be of minor significance given that internal roads and manoeuvring areas are covered in a sealed surface. As all handling of waste will be undertaken indoors the building will restrict the release of dust to atmosphere, and will be therefore of minor significance. Dust

release from on-site vehicle movements will be minor in significance given that internal roads and manoeuvring areas are covered in a sealed surface.

The principles of dust minimisation are based on keeping surfaced yard areas clean and to limit the disturbance of waste/recovered materials.

Odours associated with waste management activities are usually generated from the decomposition of biodegradable waste. The proposed MRF will manage waste predominately from commercial and industrial sources which typically have a low biodegradable content. Furthermore, the building will be fully enclosed, operating under a slight negative air pressure which will restrict the egress of odours from the site.

In terms of emissions from vehicles importing and exporting materials to and from the site, the assessment found that the annual average ambient concentrations of nitrogen dioxide may increase by about 0.5 $\mu\text{g m}^{-3}$ at identified receptors along Stoneferry Road. It should be noted that this is a worst case estimate, and does not take account of lower vehicle movements at weekends.

However, this impact must be considered in the context that the previous use of the works site generated significantly more traffic through the manufacture of pigments, and that ultimately, the MRF may off set any local increase in vehicle movements through the city wide reduction in 'waste miles' travelled taking waste for disposal outside the administrative area of Hull.

Contributions of vehicular emissions to background concentrations of other pollutants (CO, PM10, benzene and 1,3-butadiene) were all low to very low in relation to their respective annual average objective values.

LANDSCAPE AND VISUAL IMPACT

When operational the Holliday Pigments works comprised up to eleven separate buildings and a very large chimney. The design of the buildings reflects their age for example, some have brick walls with cement bonded roofs. The tallest building was the seven-storey NDM building in the north east corner of the wider works site. The two kiln buildings along the banks of the River Hull had the greatest mass of any buildings of the works, however, the chimney measured 141 metres high.

As part of the decommissioning works five buildings, located centrally within the works, have been demolished and removed from site. The kiln buildings and chimney have been retained.

Consideration of potential visual impact from the proposal has been considered both during the construction and implementation phase and the operational period.

Bank Side located on the western bank of the River Hull (to the north and west of the works) affords the best opportunity to view the site. However, it is considered that the impact of the proposed development on this vista would be of low significance given the industrial context of the viewpoint and the site. Furthermore, given the presence of the two kiln houses along the western boundary of the application site, views of the MRF building will be restricted. Views from Stoneferry Road of the application site are virtually non-existent offering only glimpses down Maxwell and Morley Street. Views from the south are limited by the railway embankment, measuring approximately 4 metres in height.

The construction and implementation phase will have a temporary potential impact on the visual amenity of the area. During this phase there will be additional plant and

equipment on site needed as part of the construction process. The process line will be constructed within the building once developed. Due to the industrial context of the site it is considered that the construction/implementation phase of the proposal will not lead any significant negative impacts on local visual amenity.

Although once constructed the MRF building will not be the highest building on the works site, it will have the greatest mass. The close proximity and scale of the surrounding buildings and structures means that the northern façade of the MRF building will be the most visible from outside the planning application site boundary. The functional appearance of the industrial unit will be at a scale and character consistent with the existing buildings both immediately to west and east of the application site.

The existing layout and context of the site restricts the amount of stand alone visual mitigation that can be incorporated as part of the proposal. With this in mind and the lack of sensitive receptors the MRF building has been designed to integrate with the surrounding environment, reflecting the local industrial character in both scale and form.

AMENITY

The potential adverse impacts on local amenity at identified receptors from litter, vermin, waste, traffic, noise, odour and air quality can be adequately mitigated using standard procedures associated with good waste management practice. These procedures will be required under the terms of the site's Environmental Permit which will be issued by the Environment Agency.

In view of the mitigation measures proposed and that the majority of waste related operations will take place within a building, it is considered that the development will not give rise to any unacceptable impacts in terms of amenity.

SOCIO-ECONOMIC

A qualitative assessment was undertaken to consider the impact of the MRF in terms of employment, economic impact and community gains. The assessment considered employment, business, tourism, and land-use issues in and around the development of the MRF, and provided comment where these are likely to be affected by the proposal. Located on the former Holliday Pigments works, the MRF will provide an integrated waste management facility offering a range of treatment options for the businesses of Hull and the surrounding district.

Directly, the MRF will create 70 much needed jobs (Hull's unemployment rate is above the national average at 5.7%) and will bring a significant amount of investment into the local economy.

The assessment has concluded that the overall impact from the development would be positive, providing employment for the local area, economic benefit (both direct and indirect).

LANDUSE

Currently, the site is undergoing a decommissioning period which saw the removal of a number of industrial buildings. Prior to this the application site was the central part of the former Holliday Pigments works. It is applicant's intention to retain the remaining building and structures on the wider works site.

The development of the MRF will include the reuse of the existing warehouse and office/welfare facilities. There will also be a number of ancillary developments external to the buildings such as the creation of a supplementary aggregate store, empty skip storage area, weighbridge and operative's car park. It is considered that the proposed use will maintain the industrial appearance/use of the site.

The assessment undertaken on air quality, including emissions from vehicles visiting the MRF, has shown that the development will not cause any significant adverse pollution that would affect the overall quality of the surrounding land. The operation of the MRF will have no significant land use effects on the wider area.

Whilst the development and operation of the MRF maybe considered as a new activity at the site, the proposed development characteristics, the existing land use allocation and the historic land use of the site place it in a sympathetic context. The proposed development is considered to be a beneficial effect in land use terms, given the function of the MRF in providing for the waste management needs, and inward investment for Hull.

CULTURAL HERITAGE

A desk-based assessment aimed to review and summarise the baseline conditions and, if necessary, outline the proposed mitigation measures during the construction and operational phases of the development of the MRF. The assessment also considered areas where development may affect previously unknown buried archaeological remains.

No cultural sites were identified within the proposal site boundary. A total of 7 sites of cultural heritage and two conservation areas were identified within 1km beyond the proposal site boundary.

The assessment identifies that the development and operation of the MRF will have negligible direct impact upon the identified cultural heritage during the construction phase. During the operation of the site, indirect impacts such as noise, vibration and emissions to air have been assessed as having no significant negative impact on identified sites.

CONCLUSIONS AND SUMMARY

This Non-Technical Summary has outlined the findings of the Environmental Impact Assessment of the development and operation of Materials Recycling Facility at Morley Street, Hull which are contained within the Environmental Statement that accompanies the planning application.

Overall, the effects of the development following mitigation are not considered to be significant. The potential impacts have been fully assessed and where appropriate mitigated as a result of an iterative design process for the development, and through careful consideration of emissions control, abatement techniques, and high quality process and architectural design.

WHAT HAPPENS NEXT?

Prior to making a decision on the planning application, Hull City Council will seek advice from a number of statutory, non-statutory consultees and key stakeholders, such as the Environment Agency, Natural England, and will make the full Environmental Statement available for examination by members of the public at the Council Offices in Hull.

Electronic copies of all the documents submitted in respect of the planning application for the development of the MRF are available to view at the following website:

www.hull.gov.uk/planning

Further information and project updates will also be available on the applicant's website:

www.mytumwasterecycling.com

In addition, this website has the applicant's contact details.

Additional copies of the Non-Technical Summary can be obtained upon written request from the following address:

Mytum and Selby Waste Recycling Ltd
c/o Encia Environmental Ltd
Encia House
Audby Lane
Wetherby
West Yorkshire
LS22 7RD