



**BNP PARIBAS  
REAL ESTATE**

Real Estate for a changing world

**Proposed Biorenewables Centre  
North Selby**

**EIA Scoping Report**

Prepared for  
UK Coal

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# 1 Introduction

- 1.1 North Selby was one of the five mines comprising the Selby complex, developed in the early 1980s and at the time the world's largest underground coal mine. It is located about 8km south of York, between the villages of Escrick and Wheldrake (see **Figure 1**).
- 1.2 Planning permission for the North Selby Mine complex was initially granted in 1976. Outline planning consent for North Selby Mine itself was granted on 10<sup>th</sup> April 1978 (Ref: C/8/999/18/PA). Further approval of reserved matters relating to the surface buildings and landscaping at North Selby was granted in March 1981 (Ref: C/8/999/18G/PA).
- 1.3 Production at North Selby Mine commenced in 1986. Rationalisation of the Selby Mine Complex began in the mid-1990s and production at the North Selby Mine ceased in 1999. UK COAL announced the closure of the Selby complex in July 2001 and overall production ceased in 2004.
- 1.4 The headgear at North Selby has been demolished and the shafts sealed. The other buildings and associated infrastructure remain in operational condition, and parts of the site have been in temporary use.
- 1.5 A planning condition attached to the planning permission for the mine required the site's restoration to agricultural use. The owners, UK Coal Mining Ltd, wish to secure an alternative viable use for the site.
- 1.6 In partnership with Peel Environmental and Science City York, UK Coal are seeking to bring forward proposals for renewable energy generation and associated R&D activities. These proposals have evolved out of a previous scheme which placed greater emphasis on R&D.
- 1.7 BNP Paribas Real Estate, as planning agents to UK Coal, are preparing an outline planning application. In view of the size of the site (37 hectares), the nature of the proposals and the environmental sensitivity the area, UK Coal have elected to carry out an environmental impact assessment (EIA).
- 1.8 This assessment is due to commence, and will comply with the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations, 1999. Regulation 10 provides for an applicant to request a "scoping opinion" from the planning authority. This report forms the basis of such a request. Subsequent sections address:
  - the EIA process;
  - the characteristics of the site and the surrounding area;
  - the nature of the development; and
  - the proposed scope of the assessment.
- 1.9 A Scoping Opinion was sought for the previous scheme, and was issued by City of York Council in September 2009. Whilst many aspects of the scope are likely to remain unchanged, the current proposals are materially different and a new Scoping Opinion was therefore considered to be desirable.

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## 2 EIA Process

### Background

- 2.1 EIA is a structured process for identifying the potential environmental effects of a development. It has been part of the UK planning system since 1988, when Regulations implementing the provisions of EC Directive 85/337/EEC were introduced.
- 2.2 In essence, EIA has been integrated into the planning process, whereby relevant projects must be subject to assessment before a planning application can be determined. The current Regulations were introduced in March 1999, implementing the requirements of amending Directive 97/11/EEC.
- 2.3 Although the procedure remains fundamentally unchanged, the 1999 Regulations extend the range of developments to which the Directive applies. They also make specific provision for determining the need ("screening") and scope ("scoping") of an EIA, and make the consideration of alternatives mandatory.
- 2.4 Guidance on the Regulations is provided in DETR Circular 02/99. An amended version of this guidance, addressing recent case law, screening procedures and the incorporation of public consultation, was published for consultation in June 2006.

### Need for EIA

- 2.5 The need for EIA for developments falling within the scope of the Regulations is derived from two schedules. EIA is mandatory for "Schedule 1" projects. The proposed Biorenewables Centre does not fall within this definition.
- 2.6 EIA is required for "Schedule 2" projects if, in the opinion of the determining authority, they are likely to give rise to "significant effects" on the environment. Schedule 2 projects are those of a type listed in the schedule that either are located within a "sensitive area" or exceed relevant thresholds.
- 2.7 Schedule 2 does not include specific reference to biorenewable projects. It does, however, under 3. *Energy industry*, include "(a) industrial installations for the production of electricity..." In so far as the Biorenewables Centre would include power generation, it is considered to fall within this definition.
- 2.8 Sensitive areas comprise Sites of Special Scientific Interest (SSSIs), land subject to Nature Conservation Orders, international conservation sites, National Scenic Areas, World Heritage Sites, Scheduled Monuments and National Parks. The North Selby site is not located within or close to any such areas.
- 2.9 The relevant threshold for 3(a) projects in Schedule 2 is 0.5 hectares, which the site exceeds by a large margin. The proposal is therefore considered to be a Schedule 2 project and will require EIA if it is likely to give rise to significant effects.
- 2.10 As an operational coal mine, the North Selby site would previously have given rise to a range of environmental effects. However, the site

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currently has a low level of use, which would change substantially were the Biorenewables Centre to be developed.

- 2.11 In addition, the site is in a rural location, with a small number of residential properties nearby. Even if measures are taken to promote sustainable travel choice, access to the Biorenewables Centre would almost certainly rely primarily on car trips.
- 2.12 Consequently, a likelihood of significant effects cannot be ruled out, and UK Coal accepts that the proposal constitutes EIA development.

#### **Role of Scoping**

- 2.13 The main steps in the assessment process are as follows:
- defining the scope;
  - consulting relevant parties;
  - carrying out baseline studies;
  - predicting the potential effects;
  - assessing the significance of those effects;
  - identifying and incorporating mitigating measures;
  - assessing the residual effects; and
  - preparing the environmental statement (ES).
- 2.14 Scoping establishes the framework for the assessment. It is therefore essential that it is both comprehensive and meaningful. The main focus of scoping is normally the range of topics to be addressed (the technical scope), and the methodology to be adopted for each.
- 2.15 It is rarely possible to fix all aspects of an EIA at the scoping stage; the scope and methodology may evolve as consultation proceeds and as the results of the assessment emerge.

### 3 The Site and its Environmental Context

- 3.1 The extent of the site is shown in **Figure 2**. It is 37 hectares in area, including a pithead area of about 10 hectares. This comprises a range of buildings, including workshops, boilerhouse and amenities block, together with extensive hardstandings and a travelling crane.
- 3.2 The remainder of the site comprises grassed bunds (mainly to the north), the former spoil heap (to the east), car parking, roads, associated infrastructure (e.g. a sewage treatment plant) and semi-mature landscaping.
- 3.3 The site is accessed from a priority junction on the A19, about 1.7km to the west. The A19 provides access northwards to York (about 8km to the city centre) and southwards to Selby, about 12km. The A1 is accessed about 22km to the west via the A64, and the M62 about 10km south of Selby.
- 3.4 There are three residential properties in relatively close proximity to the site, with a fourth property adjoining the access road. The surrounding land-use is otherwise entirely agricultural, together with a block of woodland adjoining the site to the west.
- 3.5 A minor watercourse, the Bridge Dike, crosses the western part of the site, and there is a licensed discharge to it from the sewage treatment plant. Little is currently known about ground conditions, although the previous use of the site suggests a potential for residual contamination. Water supply is provided from an on-site borehole.
- 3.6 Existing air quality is unlikely to be an issue at the site, due to its rural location. An air quality monitoring exercise is currently taking place on the site (see Appendix A). The nearest Air Quality Management Area (AQMA) is in York, about 5km to the north.
- 3.7 Environment Agency flood mapping indicates that most of the site is located in Flood Zone 1, i.e. outside the area at risk from a 1 in 1,000 year fluvial flood event. However, a small area adjoining the Bridge Dike lies within an area of potential flood risk.
- 3.8 The site is located within the York Green Belt. It is not subject to any other landscape or ecological designation. The nearest such designations are:
- Heslington Tilmire SSSI, 2.5km to the north-west;
  - Wheldrake Wood Wildlife Site, 1.75km to the north; and
  - a series of national and international designations associated with the River Derwent and its floodplain, 4km to the east, including the Derwent Ings SSSI, which forms part of the Lower Derwent Valley National Nature Reserve, SPA and Ramsar site.
- 3.9 A range of ecological survey work has already been undertaken on the site. Its habitats are generally of low ecological value, and include unimproved grassland, scrub, ruderal vegetation, immature woodland, standing water and watercourses.

- 3.10 The site is used by small numbers of common and widespread over-wintering birds, none of which are qualifying species associated with the SPA. It provides breeding habitat for an interesting assemblage of birds, including the protected Little-Ringed Plover, whilst roosting Barn Owl have been noted.
- 3.11 A pond within the site supports a medium-sized population of Great Crested Newt. No evidence has been found for the presence of Water Vole within the ditches around the site boundary. A badger sett is located within the site. The existing buildings are unlikely to be attractive for bats, and no roosts have been identified. Reptile surveys are ongoing and will be completed in September.

## 4 Proposed Development

### Overview

- 4.1 The proposal is for two electricity generating plants with a combined output of up to 27MW, both of which would utilise waste-derived fuels. In addition, the existing office building would require a change of use to R&D, educational and amenity use. The description for planning purposes is as follows:

*Use of land and construction of plant for energy from waste generation together with the alteration and re-use of the existing buildings and land to provide an Education and Sustainability Research Centre, incorporating:*

- *Research and development offices and laboratories (B1)*
  - *Demonstration-scale research facilities for renewables research (sui generis)*
  - *Ancillary education and conference facilities (D1) and renewables shop (A1)*
  - *Waste processing and fuel preparation (sui generis)*
  - *Anaerobic Digestion facility and associated energy generation (sui generis)*
  - *Energy from waste (gasification) facility (sui generis)*
  - *Car parking and ancillary facilities.*
- 4.2 It is proposed to co-locate an energy-from-waste (gasification) facility with an anaerobic digestion plant within the existing perimeter mounds.

### Gasification Plant

- 4.3 The gasification plant would use up to 140,000 tonnes of waste per annum. The waste would be non-hazardous and would arise from a combination of municipal, commercial and industrial sources. On average, this would require 32 HGVs entering and leaving the site each day. The plant will export up to 22MW of renewable energy onto the National Grid using the existing grid connection at the site.
- 4.4 The gasification technology will be housed in a new purpose-built structure. The final provider has not yet been selected, but the process is likely to be based on an "Advanced Technology".
- 4.5 Waste delivered to the gasification facility will initially be put through a recycling facility process that removes recyclable materials such as metal and glass. The residual waste is shredded within the building, and passed through to the gasification process.
- 4.6 The gasification process involves heating the waste fuel in an oxygen-deficient atmosphere to produce a gas containing hydrogen, carbon monoxide and methane. This gas is then used to generate steam and heat, together with electricity for export into the national grid, with clean emissions to air.
- 4.7 The plant will be designed as a combined heat and power (CHP) facility, with the heat being used in the proposed Education and Research Centre for Sustainability.

#### **Anaerobic Digestion**

- 4.8 The Anaerobic Digestion plant would be capable of receiving 50,000 tonnes of waste per annum. On average this would require deliveries from 12 vehicles per day. The facility would receive non-hazardous "green waste" such as agricultural waste, garden waste, food waste, commercial green waste, and paper/card that is too low-grade to recycle.
- 4.9 Waste would be composted in the absence of oxygen to produce a biogas which typically consists of 60% methane, 40% carbon dioxide. This gas would either be stored for use as a fuel off-site or combusted within a gas engine to generate up to 5MW of electricity for export to the grid. Following anaerobic digestion, the composted material would be used as a soil conditioner or land restoration medium.

#### **Research Uses**

- 4.10 With respect to the R&D uses, the intention is to re-use the existing buildings, which provide about 6,250 sqm of floorspace. Existing service infrastructure (water supply, sewage, other services) would be upgraded as necessary.
- 4.11 The site has parking capacity for 250 cars. Around 150 people are likely to be based at the site, although many of these would be part-time. With visitors attending demonstrations or conferences, site occupancy could reach around 200 people.

## 5 Overview of Proposed Scope

### Background

5.1 Schedule 4 of the Regulations states that

*"the aspects of the environment likely to be significantly affected by the development" [may include] "population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the inter-relationship between the above factors."*

5.2 This scope is not prescriptive; it is for the applicant and the local planning authority to agree the scope of each EIA on a case-by-case basis. This process normally begins with a broadly similar range of topics, which is then refined to reflect differences in the scale and type of development, the character of the site and the sensitivity of its location.

### Proposed Assessment Topics

5.3 The table below summarises the range of topics proposed in this case, together with the relevant Schedule 4 reference and a brief explanation.

Topic	Schedule 4 Reference	Justification
Air Quality	Air	Emissions from development traffic and from on-site sources, including combustion of biofuels. Risk of dust impacts on nearby properties during construction.
Ecology	Fauna Flora	The development could change some of the habitats within the site and may affect protected species.
Flood Risk, Drainage and Surface water Quality	Water Population	Part of the site is subject to flood risk. Development could change the drainage regime of the site by increasing the area of impermeable surfaces. Policy presumption that sustainable drainage techniques should be used.
Geology, Contamination and Groundwater	Soils Water	Risk of residual contamination and possibly settlement. Development could have indirect impact on groundwater if abstraction continues.
Landscape and Views	Landscape Population	Development may increase the built-up character of the site, and could affect a range of views from the surrounding countryside.
Noise and Vibration	Population	Risk of disturbing nearby residents during construction. Potential noise impacts from operational traffic and on-site plant.
Socio-Economics	Population	The development has the potential to support growth of the biorenewables sector in Yorkshire/the Humber, whilst providing employment and economic benefits at a city-wide level.

Transport	Population	The development will generate traffic, which could have implications for junction capacity (mainly at the site access/A19 junction). Potential impacts on/benefits to public transport and pedestrian/cycle mobility. Need to consider construction traffic and management. Need to develop a Travel Plan.
Waste	Soils Population	The development has the potential to make a significant contribution to strategic objectives through energy recovery and the diversion of waste from landfill. It will also create its own waste streams during construction and operation.

5.4 The following topics are not considered to merit specific assessment:

Topic	Explanation
Agricultural land	No part of the site is in agricultural use.
Cultural heritage	It is assumed that any relevant features would have been disturbed/removed when the site was developed as a mine. Any impacts on the settings of features outside the site will be addressed in the landscape and visual study.
Electronic interference, wind and sunlight/daylight	No tall buildings are proposed.

#### Other Aspects of Scope

5.5 The assessment will consider all other aspects required in Annex C of Circular 02/99: Information to be Included in an Environmental Statement, including:

- the main alternatives addressed during development of the proposals;
- effects arising both from construction and from the permanent features and operation of the development;
- categorisation of effects on the basis of their value (positive, negative etc), sequence (direct, indirect etc), occurrence (short/long-term) and permanence;
- measures envisaged to mitigate significant adverse effects; and
- combined and cumulative effects, taking account of committed developments.

#### Structure of the ES

5.6 The structure of the ES has yet to be finalised, but is currently anticipated to comprise:

- a series of technical annexes reporting the assessment of each topic;

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- a Main Report, setting out the methodology, policy context and baseline conditions, and describing the findings of each technical assessment; and
  - a Non-Technical Summary.

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## 6 Scope and Methodology for Assessment Topics

- 6.1 This section sets out the proposed approach to be adopted for the assessment of each topic. It is anticipated that consultation with relevant parties will take place at the outset of the assessment, and that some aspects of the approach may change as a result.

### **Air Quality**

- 6.2 The potential issues will comprise odour, construction dust, and emissions from traffic and on-site sources (primarily the anaerobic digestion and CHP plant). The main assessment tasks would comprise:

- baseline air quality monitoring as agreed with the City Council;
- a review of baseline air quality data and the City of York LAQM process;
- assessment of existing and operational traffic emissions;
- determination of stack heights for the biomass generation plant in accordance with the D1 guidance note;
- detailed dispersion modelling of emissions from the anaerobic digestion process and any other relevant point sources, using the ADMS 4.2 software, in accordance with the Environment Agency's H1 guidance;
- qualitative assessment of odour and bioaerosols, taking account of nearby receptors, likely sources and potential mitigation measures if available; and
- qualitative assessment of construction dust, taking account of predominant meteorological conditions, nearby receptors, industry experience/guidance and effectiveness of mitigation.

- 6.3 Since the previous Scoping Opinion was issued, an air quality monitoring exercise has commenced at the site. The scope of this survey was agreed with the City Council and is described in Appendix A.

### **Ecology**

- 6.4 The ecological assessment would comply with best practice and would comprise the following tasks (many of which have already been completed):

- desktop review of biological data within a 1km radius based on enquiries to statutory/non-statutory bodies and search of online resources;
- extended Phase 1 habitat survey;

- great crested newt presence/absence survey, following Natural England guidelines, and subsequent monitoring of any newts found to be present;
- preliminary survey to determine likely presence of other protected species;
- possible surveys for over-wintering and breeding birds, bats, badgers and water vole; and
- assessment of potential impacts, recommended mitigation, re-evaluation of residual effects and write up.

#### **Flood Risk, Drainage and Surfacewater Quality**

6.5 A Flood Risk Assessment (FRA) compliant with PPS25 will be prepared. Its main elements will comprise:

- consultation with Environment Agency, City of York Council and other relevant parties;
- site visit and review of historic flooding risk;
- characterisation of potential flooding sources, zones and vulnerability of proposed uses;
- assessment of potential changes to off-site risk;
- recommendation of mitigation measures as necessary, taking account of climate change;
- preparation of an outline surfacewater drainage strategy, taking account of feasibility of sustainable drainage (SUDS) features; and
- assessment of residual flood risk and write up.

6.6 In addition, comment will be made on any potential pollution risks to surfacewater quality, taking account of site history, construction methods and the proposed uses. No hydraulic modelling or water quality sampling is currently proposed.

#### **Geology, Contamination and Groundwater**

6.7 A Phase 1 (desk-based) geo-environmental study will be undertaken in order to characterise potential sensitivities and risks. This will include:

- site visit/visual inspection;
- historic map regression to identify previous uses;
- review of BGS published information and borehole records to determine ground/groundwater conditions;
- review of any previous studies or records (e.g. site investigations or validations carried out when North Selby mine was decommissioned);

- an initial ground contamination assessment based on a conceptual risk model identifying potential risks to, for example, groundwater, site workers, future users and surrounding receptors as a result of the proposed redevelopment;
- initial assessment of potential ground engineering constraints, and
- recommendation of Phase 2 site investigation works as appropriate.

#### **Landscape and Views**

6.8 The assessment would follow the Landscape and Visual Impact assessment (LVIA) guidance produced by the Landscape Institute/EMA (2002) and the Landscape Character Assessment Guidance produced by the (former) Countryside Agency (2002). It would comprise the following tasks:

- desktop review of relevant policy and studies (e.g. landscape character assessments);
- site visit and fieldwork to determine key landscape features, identify receptors, characterise surrounding landscape and define visibility;
- identification of zone of theoretical visibility (ZTV); and
- assessment of potential impacts, recommended mitigation, re-evaluation of residual effects and write up.

6.9 Modelled views or photomontages will be prepared in order to illustrate the impact from relevant viewpoints, which will be agreed with the City Council. The findings of the LVIA will inform development of the site masterplan, which will include a landscape strategy.

#### **Noise and Vibration**

6.10 The potential issues are likely to comprise disturbance during construction (from on-site activities and traffic), noise from operational traffic and noise from operational fixed sources (including external/building services plant and break-out noise from buildings). The main tasks will cover:

- baseline monitoring to determine the current noise climate around the site (locations and protocol to be agreed with the EHO);
- assessment of construction noise in accordance with BS5228-1:2009 "Noise and Vibration Control on Construction and Open Sites", and accepted mitigation options;
- assessment of operational traffic noise in accordance with the Calculation of Road Traffic Noise (CRTN) methodology; and
- determination of potential noise impact from fixed operational plant in accordance with BS 4142:1997 "Method for Rating Industrial Noise affecting Mixed Residential and Industrial

Areas", utilising noise modelling software LIMA, and identification of mitigation options where necessary.

### **Socio-Economics**

- 6.11 The development has the potential to stimulate a step-change in activity in the biorenewables sector within the region, as well as providing employment and a range of spin-off research benefits within the city. The socio-economic assessment will comprise the following tasks:
- review of baseline indicators for the city-wide and regional economy in terms of employment, structure, role of R&D, the University etc;
  - review of prospects for the biorenewables and related research sectors within the region;
  - prediction of impacts on direct/indirect/induced employment; and
  - prediction of impacts on city-wide and regional economies, including income generation, supply chain effects, strengthening of strategic links and the role of the University/other bodies.

### **Transport**

- 6.12 A Transport Assessment (TA) will be carried out and will be submitted as part of the ES. The TA will comply with current guidance and will build on work carried out in support of UK Coal's earlier proposals for the site. It is anticipated, for example, that traffic surveys undertaken in November 2007 and the model created for the site access/A19 junction would be re-used.
- 6.13 The assessment would be carried out in consultation with the Highways Agency and the local highway authority, and with reference to national, regional and local transport policies. It would comply with the Department for Transport document "Guidance on Transport Assessment".
- 6.14 The main tasks would comprise:
- site visit/audit to identify any changes to local transport networks;
  - review of policy, public transport provision and latest accident data;
  - determination of need for any additional traffic surveys;
  - agreement of future assessment scenario;
  - derivation of development trips from observed/comparative data (e.g. TRICS) or census;
  - allocation of derived vehicle trips to network using gravity model;

- assessment of any junctions likely to be significantly affected using appropriate software (e.g. PICADY);
- propose/agree any highway improvements that may be required;
- propose/agree any improvements to other modes that may be required; and
- preparation of a Framework Travel Plan.

#### **Waste**

6.15 The assessment would be likely to comprise:

- A review of relevant waste policy at local, regional and national levels, and specifically the Municipal Waste Management Strategy for the City of York and North Yorkshire, 2006.
- A review of the waste management regime within the likely catchment of the development, in terms of the main waste streams, targets and performance (e.g. re recycling, energy recovery, diversion from landfill).
- Characterisation and quantification of the main waste streams to be used by the development; assessment of their impact and significance in relation to relevant targets, the waste management regime and the best practicable environmental option (BPEO) set out in the Waste Strategy.
- Characterisation and quantification of the main waste outputs and by-products from the operational development; assessment of their impact and significance.
- Characterisation and quantification of the main waste streams likely to arise during construction; assessment of their impact and significance taking account of best industry practice and regulatory requirements; preparation of an outline Site Waste Management Plan.

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Appendix A: Summary of Baseline Air Quality Survey

### Need

SKM Enviros are currently undertaking a baseline air quality survey in the vicinity of the site. This survey will feed into the air quality assessment that will form part of the EIA. The survey will take place over six months, commencing on 1<sup>st</sup> April 2010 and finishing on 1<sup>st</sup> October 2010.

The baseline air quality survey is needed for the following purposes:

- To provide site-specific baseline data for substances likely to be of concern to York City Council, in the light of its local air quality management responsibilities. The key substances are likely to be nitrogen dioxide and fine particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>).
- To provide site-specific baseline data for substances which are not covered under local air quality management and therefore do not have an extensive database of local baseline data. The key substances are likely to be dioxins and furans, polycyclic aromatic hydrocarbons, and metals including arsenic, cadmium, nickel and chromium.
- To provide site-specific baseline data to address public concerns, both during the planning/permit application process, and once the proposed facility is operational. These concerns are likely to focus mainly on dioxins, furans and fine particulate matter.
- To provide baseline data in support of the Environmental Permit application

### Scope

The survey has been designed to provide a baseline for the key emissions from the proposed facility for which existing local data may not be adequate, and which could potentially constrain the design (e.g. affecting minimum acceptable stack height). The scope of the survey has been discussed and agreed with the local authority.

#### *Substances included in Monitoring Survey*

Substance	Likely Significance
Particulate matter	This is likely to be a significant issue for the proposed facility.
Sulphur dioxide	Sulphur dioxide is not likely to be a significant issue, but has been included as a low-cost survey technique is available
Oxides of nitrogen	This is likely to be a significant issue for the proposed facility. Nitrogen dioxide was included in the monitoring survey
Metals	The waste incineration directive identifies 12 metals. <sup>[1]</sup> This is likely to be a significant issue for the proposed facility, particularly arsenic, cadmium, nickel and chromium.
Dioxins and furans	This is likely to be a significant issue for the proposed facility.

<sup>[1]</sup> Cadmium, Thallium, Mercury, Antimony, Arsenic, Lead, Chromium, Cobalt, Copper, Manganese, Nickel, Vanadium

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Substance	Likely Significance
Polycyclic aromatic hydrocarbons (PAHs)	This is potentially a significant issues for the proposed facility

#### Methodology

- Fine particulate matter (PM<sub>10</sub>) is being measured using a beta-attenuation monitor at one location over a six month period having regard to the guidance in Environment Agency guidance document M17. This survey commenced on the 1st April 2010.
- Dioxins, furans and polycyclic biphenyls (PCBs) are to be measured using a high volume sampler at one location. Three spot measurements, each of approximately 24 hours duration, are to be carried out during the six month period, with one sample taken during each season that the survey covers. The first spot sample was carried out on 27th April 2010.
- Polycyclic aromatic hydrocarbons (PAHs) are to be monitored in the same way as dioxins, furans and PCBs.
- Trace metals are to be monitored in the same way as for dioxins, furans and PCBs.
- Nitrogen dioxide and sulphur dioxide are to be measured using diffusion tubes in triplicate at six locations on and around the site. The diffusion tubes will be situated for 6 months and the monitoring commenced on the 3rd March 2010.

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Figure 1 – Location Plan

North Selby Site Location Plan



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Figure 2 – Red Line Plan