Key Issues –
The site lies adjacent to the River Tyne in North Tyneside. The site has been in industrial use for many years, originally as a shipyard but most recently for car storage. Despite the industrial heritage the site lies only 500m from the residential area of East Howdon. Other significant uses in the vicinity include the East Howdon Sewage Treatment Works, that already causes problems for the local community in terms of unpleasant odours, as well as a range of smaller waste treatment facilities.

Due to the scale and nature of development proposed there was the potential for significant environmental effects particularly in terms of air quality, odour and visual impact. Despite the opportunities offered by the development in terms of local job creation there was concern expressed by the local community about the development of another polluting use on their doorstep. To address these concerns significant time was taken in meeting with community representatives and presenting to local residents. Two drop-in events were held in the heart of the community where members of the project team were on hand to answer questions about the gasification process and likely impacts upon residents. To supplement the ES a Health Impact Assessment (HIA) was requested by the Local Planning Authority to assist in addressing the concerns of the local community.

Purpose of the project
The development site extends to approximately 2.8 hectares and is located on the northern bank of the River Tyne on land owned by the Port of Tyne. The scheme was designed to find a profitable new use for a currently underutilised part of the Port of Tyne land portfolio that was felt to have limited potential for other uses because of the proximity of the below ground Tyne Tunnels. The project will generate revenue enabling the Port to continue investing in its infrastructure for the benefit of the North East economy as well as generating electricity for export to the National Grid.

Description of the project
The scheme relates to the development of an Energy Recovery Facility with fluidised bed reactors gasification technology. The site is intended to accept both Local Authority collected municipal waste and construction and Industrial waste. This will comprise Refuse Derived Fuel (RDF) that has been filtered and screened to take out all potential recyclable material prior to it being treated and baled (in accordance with the waste hierarchy).
Lessons learnt
The key difficulty in preparing the ES for this scheme was that it was submitted in advance of securing a gasification technology partner. This meant that it was necessary for the ES team to make a series of worst-case assumptions in order to carry out their assessments. This made some of the potential effects appear worse than they would have done if greater detail had been available to inform the assessments. An example of this was in relation to the assessment of noise. A baseline noise survey was carried out at the nearest sensitive receptors to determine existing ambient and background noise levels. In the absence of an operator or contractor the assessment of construction noise had to be based on an assumed inventory of plant. Noise levels for construction, decommissioning and operation had to be derived from the measured levels and the assumption made that noise from the facility would not exceed existing background levels. The ES concluded that a suspensive condition would be appropriate requiring a detailed noise assessment be carried out against the noise limits derived here. In the absence of an operator the plant had to be assumed to meet the Emission Limit Values stipulated in the Industrial Emissions Directive (IED). So for the air quality modelling the assessment had to assume that the maximum allowed concentrations would be constantly emitted from the facility for every day of the year. This approach was very conservative since the actual emissions are likely to be significantly less than the allowed maximum.

Lessons learnt cont.–
As a consequence of this the air quality effects were classified as minor adverse requiring a detailed mitigation package. Following the submission of the ES the Local Planning Authority requested that a standalone HIA be prepared to accompany the application. Although there is no statutory requirement to carry out a HIA the amended EIA Directive (2014/52/EU) includes requirements to consider direct and indirect significant effects on ‘population and human health’. The aims and objectives of the HIA were to determine the potential health impacts of the proposed development on local receptors; to assess the nature and extent of these health impacts; to identify ways to maximise positive and minimise negative health impacts and to inform the planning process and respond to health issues raised through the process. The HIA provided reassurance that despite the EIA process identifying potentially adverse effects it is unlikely that any measurable change in health outcomes would occur for local communities as a result of the development. Undertaking the HIA however came at a significant additional financial cost to the developer.

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