# ADDENDUM

# Item No: 5.1

Application No:16/01922/FULDate valid:1 December 2016Target decision23 March 2017date:1 December 2016

Author:Rebecca Andison**2**:0191 643 6321Ward:Riverside

Application type: full planning application

# Location: Howdon Yard Tyne View Terrace Wallsend Tyne And Wear

# Proposal: Erection of Energy Recovery Facility (with fluidised bed reactors gasification technology) and associated infrastructure

Applicant: Howdon Green Energy Park Ltd, C/o Agent

Agent: Nathaniel Lichfield & Partners, Mr Dominic Holding NLP, Generator Studios Trafalgar Street Newcastle Upon Tyne NE1 2LA

**RECOMMENDATION:** Minded to grant legal agreement req.

## Additional Representations

<u>1no additional letter of support has been received from Tyne Tunnels 2</u> - Brings an opportunity to create new jobs and apprenticeships, secure existing

employment for the Port and for the benefit of the local area.

- Meets the requirements of the planning framework and will provide a sustainable source of electricity.

## Consultee Comments

Director of Public Health

There is a lack of evidence on the known health impacts associated with gasification as a process for energy from waste (EfW). Evidence reviews published on other forms of combustion for waste disposal conclude that the health impacts associated with air quality and pollutants is low and undetectable at a local level.

In the UK there is a strong track record in the regulation of waste disposal plants, and permits are dependent upon evidencing stringent processes for the control and disposal of harmful products related to EfW production.

Although gasification is still perceived as a relatively new process for EfW, industry generated evidence and an Environment Agency appraisal indicate that the process is far cleaner than other combustion process.

The impact on self-perceived health is hard to quantify, however public perception of incineration and impact on health were concerned with odour, ash and emission/pollutants. A study conducted by Southampton University indentified that

public engagement and consultation during the development and operational phases can help to alleviate these concerns.

### Background -

Current Government policy regarding waste is to reduce significantly the amount of waste disposed of to landfill, reduce waste creation, increase the re-use of waste material and recycling, and to recover energy from waste incineration where possible.

There are known negative impacts for the environment and health associated with landfill disposal. Cleaner and less costly alternatives to the use of landfill include high-temperature incineration of municipal waste (EfW). Gasification is a relatively new commercial method of EfW.

Gasification produces less landfill as a waste product, produces materials that can be used within the construction industry and produces a stable gas that can be stored and used as a renewable energy source, which reduces  $CO_2$  and other associated greenhouse gasses. There are filtering technologies available that further reduce any emissions from the chimney.

The gas product of gasification contains tars, particulates, halogens, heavy metals and alkaline compounds that must be removed before the gas is used in power generating equipment. The concentration of these compounds is dependent upon the original waste source. Most common forms of waste used in gasification incinerators are pre-sorted.

#### Impact on health -

There have been a variety of studies into the health effects of exposure to incineration emissions over past decades. However, studying the impact of incinerator emissions on health is complex and difficult, particularly as the emissions from incinerators are generated by a variety of sources and therefore cannot be solely attributed to incinerators.

In 2002 the Environment Agency undertook a technological review of waste disposal techniques. In this review the health and environmental impact of gasification as a waste disposal process was assessed.

The technical appraisal undertaken by the Environment Agency identifies that the key concerns from a planning perspective will largely centre on concerns over air emissions. Issues relating to transport and visual impacts should in theory be less significant as gasification processing plants are smaller in scale, compared to traditional incinerators.

#### Air quality -

There is a strong body of evidence that poor air quality and high concentrations of pollutants has a detrimental impact on health, in particular respiratory health, cardiovascular disease and more recently a link between proximity to roads and dementia. However the association between incinerators and impact on health as a

result of increased exposure to pollutants emitted from incinerators is not conclusive.

Public Health England conclude that the emission from modern (municipal waste) incinerators make only a small contribution to local concentrations of air pollution and that the impacts on health are likely to be relatively small.

During the construction phase it is anticipated that the main air quality impacts will include dust deposition, visible dust plumes, elevated PM<sup>10</sup> and PM<sup>2.5</sup> concentrations, as a result of dust generating activities on site , and an increase in concentrations of airborne particles and nitrogen dioxide due to exhaust emissions from diesel powered vehicles and equipment used on site.

There are a number of industry standard procedures which provide guidance on assessing the risk to human health and processes to mitigate against any potential harm caused during the construction/demolition phase.

Once the plant is in operation the main pollutant emissions that will be emitted from the plant when operational will include Nitrogen oxides, sulphur oxides, particulates, ammonia and carbon dioxide.

The perceived advantage of gasification, in comparison to other combustion processes is that the gasification process produces lower levels of pollutants.

The Environmental Statement for the proposed development states: 'The traffic data provided for the baseline and with development identified there are no affected roads resulting from the proposed development and therefore no detailed assessment is required. The potential change from traffic emissions on air quality would be negligible'.

#### Noise and Visual environment -

The noise and odour issues are easily contained, so long as good modern design of the waste reception facilities is adopted. Visual impact issues may well be reduced compared to traditional incinerators due to the smaller scale of the facilities, but the difficulties over hiding the chimney will still remain.

The Health Impact Assessment (HIA) conducted on behalf of the developer states that there would be an anticipated reduction in noise levels during the construction phase of -9 to 0 decibels in comparison to current noise levels – this should be verified. The Environmental Statement concludes that, once the site is operational, there will be a negligible effect at the nearest sensitive noise receptors, with sound from the facility not predicted to exceed the measured background level at these locations.

## Transport -

Vehicular traffic can be a source of; noise pollution, air pollution through exhaust emissions, be a nuisance, increase traffic congestion, cause damage via vibration, and increase the accident risk to pedestrians The HIA estimates that during the construction phase there will be in the region of 5-10 heavy earth moving vehicles, as well as concrete batching and 50 HGV outward bound journeys per day. There is no estimate of inward journeys. It is anticipated that during the construction phase there will 150 construction workers requiring access to the site each day. This impact of this may need further consideration as the HIA makes no reference to the increased traffic volume generated by 150 construction workers.

Whilst in the operation phase, in comparison to other treatment or processing facilities the number of transport movements will be lower as the mass reduction caused in the process is much greater than caused in composting, anaerobic digestion or recycling.

The current site is an HGV storage facility; the Environmental Statement states that there will be no significant increase in volume of traffic comparing current site use and proposed site use.

## Employment, socioeconomics and housing -

The development offers direct employment both in the construction (150 construction workers) and operational phase (50 full-time equivalent posts). The issue is that although there are guaranteed jobs, this will only directly benefit the immediate community if these posts are filled by local people. It is not clear how many jobs will be lost as a result of the proposed changes to the current site.

The key socioeconomic factors will be influenced by increased employment and income opportunities; however any increase in income would be offset by any devaluation in house price. A UK study of EfW plants and impact on house prices in 5km radios found that there was no negative impact upon house prices. Caution does need to be applied to this study as it was only conducted in three areas of the UK and therefore may not be representative of North Tyneside.

The other key issue for consideration is that housing in the vicinity of this proposed site is already situated near to the SITA household recycling plant and therefore any negative impact on house value may have already been affected.

There may be a future impact upon self-perceived health and wellbeing, There is a lower proportion of people in all four wards who rate their health as 'very good' and 'good' compared with the national figure (81.4%) and the North Tyneside figure (78.2%). It is not possible to determine the impact of the development of this site on self-perceived health and wellbeing.

There were two inaccuracies contained in the HIA, these related to access to health care. The HIA stated that within 2 mile radios of the site there were 21 GP practices and 5 hospitals. This is not an accurate reflection of health care provision. The four wards covered by the HIA have a total of 10 GP practices and there is one hospital situated in North Tyneside.

# Additional condition

To prevent odour escaping from the RDF handling and storage building when the doors are opened the following condition is recommended:

Prior to the development being brought into operation details of a secondary set of sealed doors to be installed within the RDF handling and storage building, must be submitted to and agreed in writing by the Local Planning Authority. The doors must be installed in accordance with the agreed details prior to the operation of the development commencing.

Reason: To safeguard the amenity of nearby residents having regard to policy E3 of the North Tyneside Unitary Development Plan 2002 and National Planning Policy Framework.