NORTH LONDON WASTE AUTHORITY

NORTH LONDON HEAT AND POWER PROJECT

ENVIRONMENTAL STATEMENT: NON-TECHNICAL SUMMARY

The Planning Act 2008 The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 Regulation 5 (2) (a)

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CONTENTS

Glossary

See Project Glossary (AD01.05)

1. WHAT IS THE NORTH LONDON HEAT AND POWER PROJECT?

The North London Heat and Power Project is the replacement of an existing Energy from Waste facility with a new facility as well as other buildings and infrastructure associated with the proposal. The Edmonton EcoPark is located in the London Borough of Enfield. The existing Energy from Waste facility, which processes waste from seven north London Boroughs, has limited operational life remaining, and needs to be replaced. The proposed replacement Energy Recovery Facility would be more efficient, generating around 70 megawatts of electricity. At this level of electrical output, the replacement facility would be a Nationally Significant Infrastructure Project under the Planning Act 2008, and so the application for the Development Consent Order will be determined by the Secretary of State for Energy and Climate Change (rather than the London Borough of Enfield).

The application for the North London Heat and Power Project is being made by North London Waste Authority, the statutory waste disposal authority for seven North London boroughs. The Application Site is shown in Figure 1.2. All applications for development consent for Nationally Significant Infrastructure Projects must satisfy policy requirements in the relevant National Policy Statement. The National Policy Statements relevant to this Project are the Overarching National Policy Statement for Energy (EN-1) and the National Policy Statement for Renewable Energy Infrastructure (EN-3).

The Environmental Statement is part of the Development Consent Order application that describes the environmental effects of the Project. The Environmental Statement has been prepared in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009.

This document forms the Non-Technical Summary of the Environmental Statement for the North London Heat and Power Project.

Figure 1.1: Illustration of the possible design of the proposed Energy Recovery Facility

Figure 1.2: The Application Site (edged red) and its surrounding area

2. WHAT IS PROPOSED?

The replacement of the existing Energy from Waste facility with a new facility would result in a new layout for the Edmonton EcoPark. As shown in Figure 2.1, the Project includes the following main buildings:

a. Energy Recovery Facility;
b. Resource Recovery Facility (including Reuse and Recycling Centre and Recycling and Fuel Preparation Facility); and
c. EcoPark House for visitor, education and community uses, Edmonton Sea Cadets and offices.

The Project also includes associated plant, landscaping and engineering works.

To make way for these buildings the northern part of the Edmonton EcoPark would be cleared including removing the existing composting facility which would not be replaced.

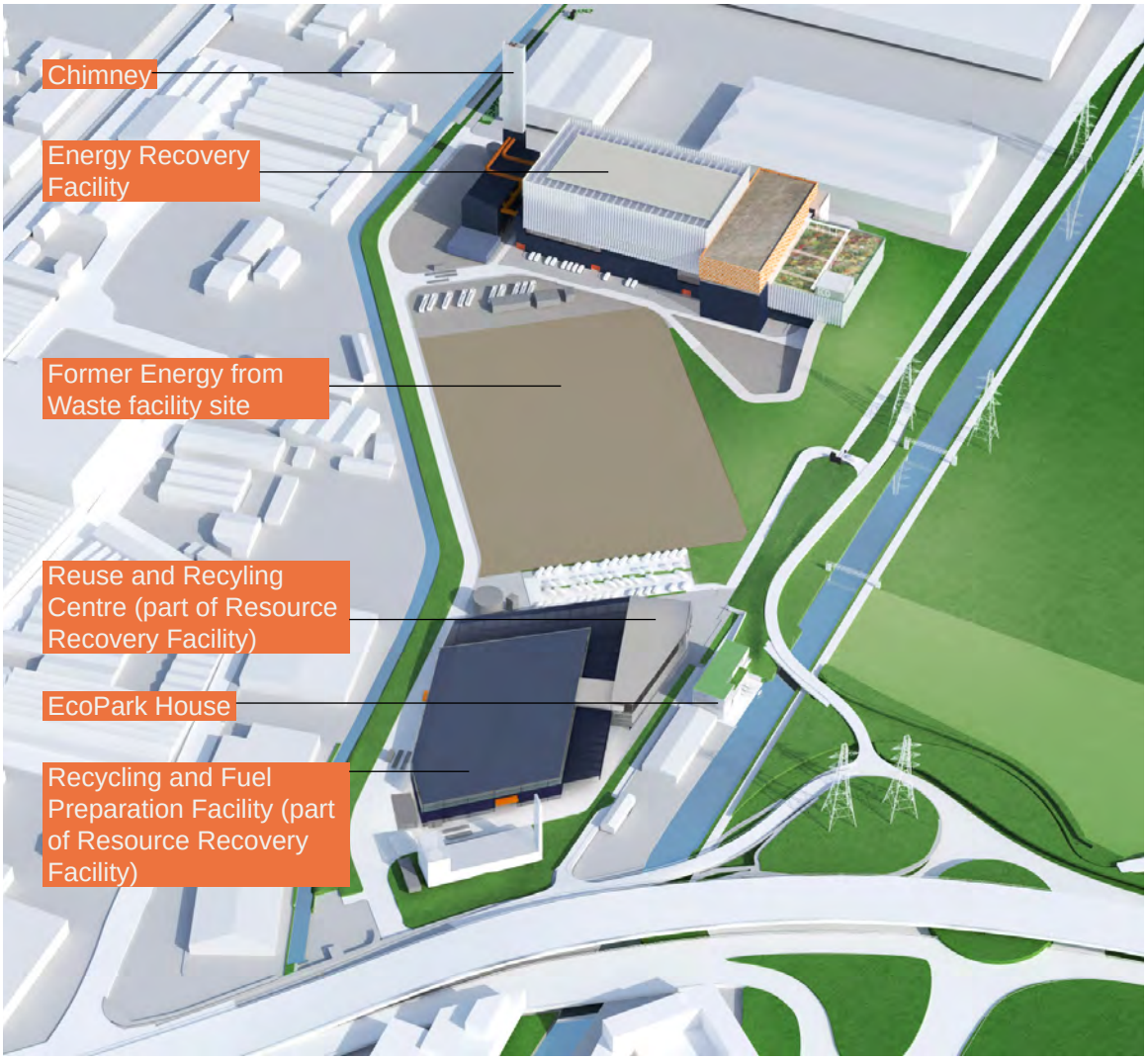

Figure 2.1: Illustrative project components for Edmonton EcoPark

Energy Recovery Facility

The proposed Energy Recovery Facility would be located within the north of the Edmonton EcoPark and would generate electricity using waste as a fuel. The height and shape of the facility is designed to minimise visual effects and different materials are proposed for different parts of the facility to help blend it into the surroundings as far as possible. The chimney would be alongside the building; it would be around the same height as the existing chimney, be rectangular in shape and be constructed of materials that help it fade into the background. The proposed Energy Recovery Facility would use air cooling technology.

Resource Recovery Facility

The Resource Recovery Facility would be split into two sections. One side would be the Recycling and Fuel Preparation Facility for bulky waste management, where large items brought in by borough collection trucks would be checked to see if materials can be recycled. Waste left over would be transferred to the proposed Energy Recovery Facility. The other side would be a new Reuse and Recycling Centre where members of the public and small businesses could bring their recycling and bulky items for disposal.

EcoPark House

EcoPark House would be a two-storey building to be used as an education, community and visitors' centre; for the Edmonton Sea Cadets (who are currently located in an existing building within Edmonton EcoPark, next to the River Lee Navigation); and for other administrative and community purposes. The building would front onto the River Lee Navigation.

Access

Vehicles moving to and from the Edmonton EcoPark would include refuse collection vehicles, heavy goods vehicles, private and commercial vehicles delivering waste to the proposed Energy Recovery Facility and Resource Recovery Facility, and staff and visitors. The Edmonton EcoPark would be accessed at three locations:

a. Southern entrance off Advent Way (existing access point which would continue to be the main operational access);
b. Eastern entrance off Lee Park Way (for the public accessing the Reuse and Recycling Centre, staff, Edmonton Sea Cadets and visitors); and
c. Northern entrance from Deephams Farm Road/Ardra Road (construction and operational access point).

These access points along with other temporary accesses are shown in Figure 2.2.

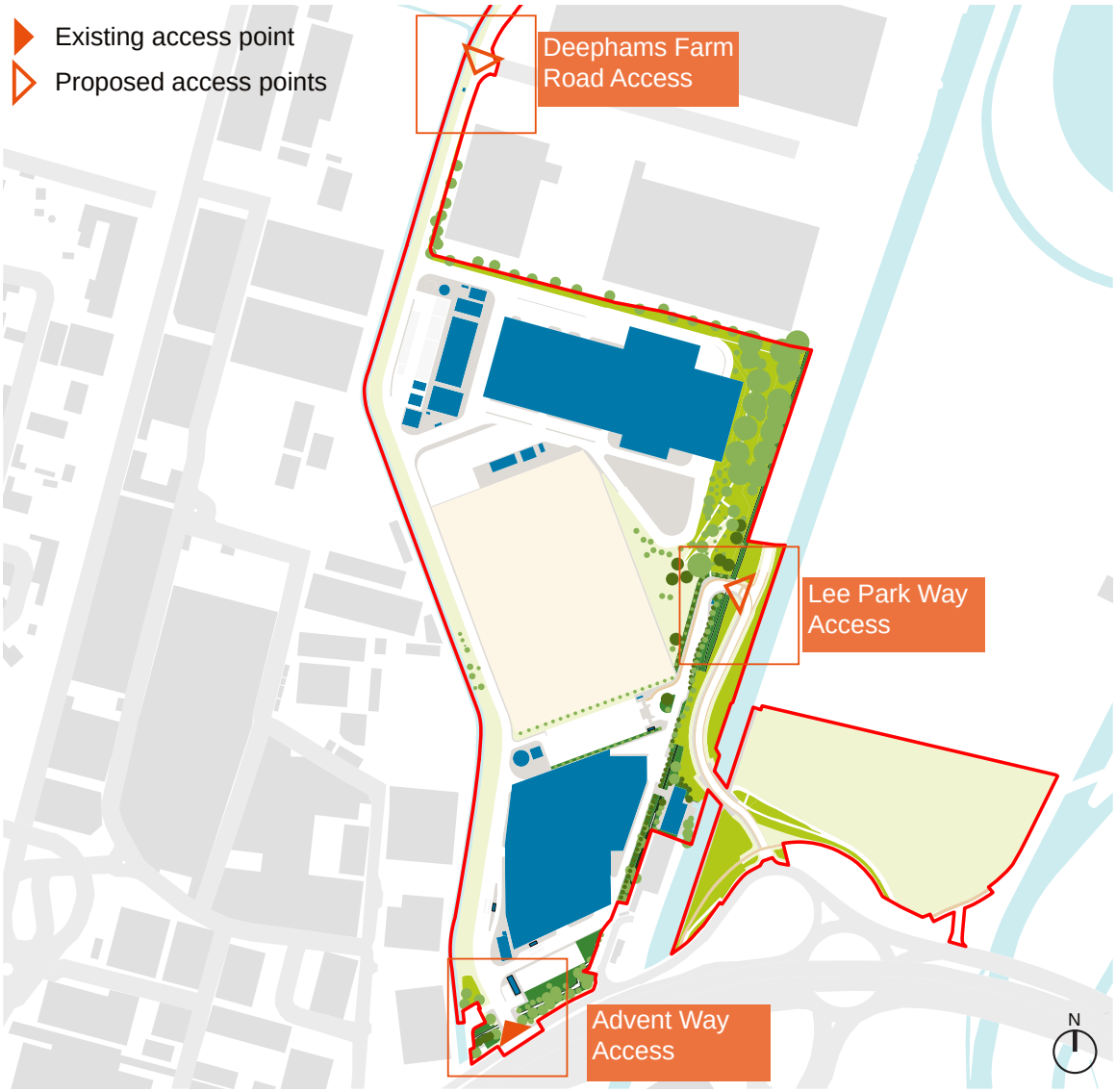

Figure 2.2: Access points

Landscaping

The existing green areas within the Edmonton EcoPark are mainly located at the east, adjacent to the Lee Valley Regional Park.

Through a site wide strategy (shown in Figure 2.3), the landscaping is intended to screen and soften the proposed buildings, integrate with the Lee Valley Regional Park (providing ecological benefits), and design lighting to avoid light spills into nearby parks and maintain dark areas for wildlife, particularly bats. In addition, for some buildings biodiversity would be encouraged through the provision of green and brown roofs. Green roofs are rooftops landscaped with plants. Brown roofs are similar, but are left to seed naturally for greater diversity.

Landscaping would be undertaken along the eastern boundary along Enfield Ditch. The existing landscaping would be remodelled to create a new east facing slope rising up towards the proposed Energy Recovery Facility (with new native tree and shrub planting) whilst retaining an area of existing trees along Enfield Ditch.

Around the new access off Lee Park Way (eastern entrance), trees and shrubs would be planted to enhance the setting of Enfield Ditch and River Lee Navigation.

Figure 2.3: Landscaping

3. WHY HERE?

The decision to propose locating the replacement Energy Recovery Facility on the Edmonton EcoPark is the result of essential site requirements needed for a new facility:

a. Site to be in north London;
b. Site to be of sufficient size for the required facilities;
c. Site to be identified for waste use in local policy documents;
d. Site to be in accessible location with good road transport links; and
e. Site to be available to North London Waste Authority.

It was on this basis that the Edmonton EcoPark was identified as the most appropriate site for the provision of the new facility.

A number of different possible layouts were explored (see Figure 3.1), with the primary constraint being the need to continue operation of the existing Energy from Waste facility while the proposed Energy Recovery Facility is built. Due to its size the only place the new facility can therefore be located is in the northern-most section of the Edmonton EcoPark. This is also the most suitable location because a thick layer of clay protects the underlying aquifer.

Figure 3.1: Site layout options

The bunker is the deepest part of the proposed Energy Recovery Facility, and is the most likely to adversely affect the aquifer below. Because of this, the bunker should be placed where the London Clay is thickest, to ensure the aquifer is unaffected by the proposed Energy Recovery Facility, as shown in Figure 3.2.

The shape, sizing, location and design of the proposed Energy Recovery Facility and chimney have also been given much consideration with environmental factors being key in developing the proposals. Visual impacts have been carefully considered in order to provide a design that minimises the height of the buildings, includes appropriate landscaping, and therefore minimises the visual impacts from all directions.

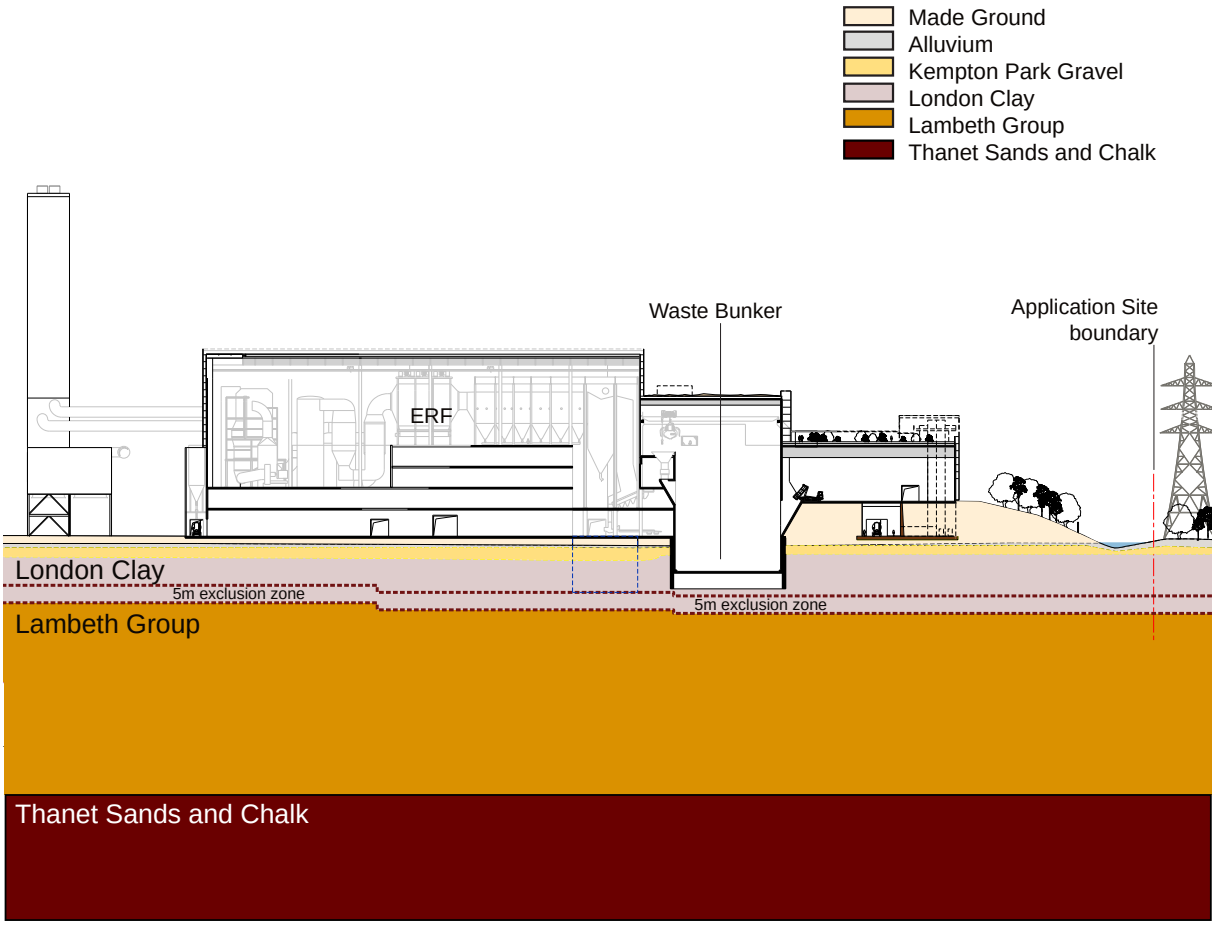

Figure 3.2: Site layout options

4. HOW WOULD IT BE CONSTRUCTED?

Construction for the North London Heat and Power Project is assumed to start in 2019 and be completed in 2028. The Project needs to be staged to ensure that existing waste management operations can remain functional throughout, i.e. the existing Energy from Waste facility cannot cease operating until the proposed Energy Recovery Facility is operational.

The Project has therefore been split into four key stages as set out in Figure 4.1, all of which are assessed within the environmental impact assessment. The construction of Resource Recovery Facility and EcoPark House would be completed in Stage 1.

All construction material transferred to and from the Application Site would be moved by road.

Construction traffic would primarily use the southern entrance at Advent Way for works on the southern part of the Edmonton EcoPark (i.e. construction of Resource Recovery Facility and EcoPark House and demolition of the existing facility), and the northern entrance at Deephams Farm Road for construction of the proposed Energy Recovery Facility.

There would be a temporary laydown and construction area to the east of the Edmonton EcoPark that would be used for the delivery and storage of materials, temporary offices and welfare facilities and some construction activities such as fabrication and assembly works.

Cranes and other plant would be used during demolition and construction works. During construction, good practice measures would be followed to ensure that the risk of impacts on people and the environment from construction are responsibly managed. A Code of Construction Practice, which sets out good practice, has been prepared and would be implemented.

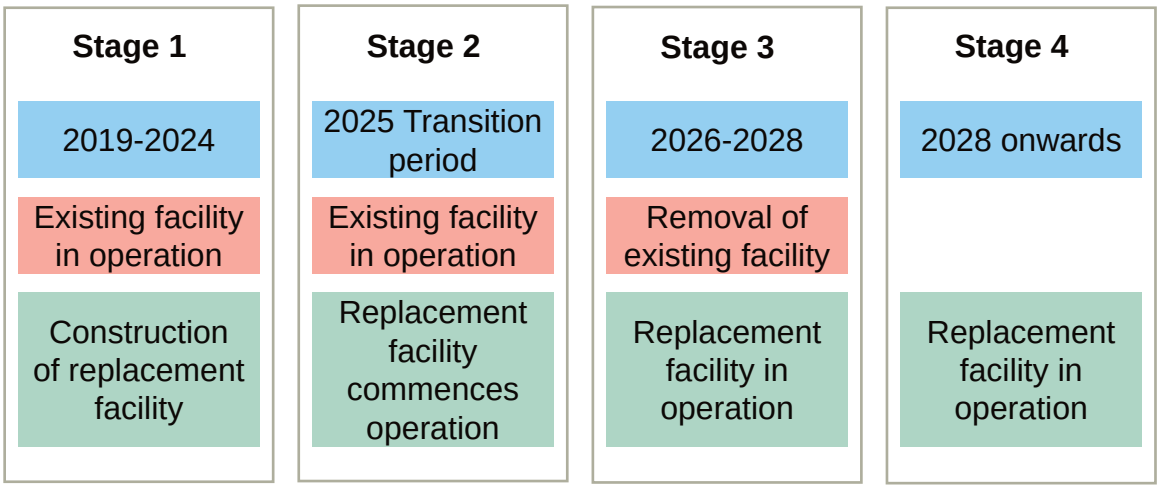

Figure 4.1: North London Heat and Power Project stages with assumed dates

5. SUMMARY OF ENVIRONMENTAL IMPACT ASSESSMENT FINDINGS

The environmental impact assessment has been undertaken in part to avoid or reduce negative environmental effects and to also identify and promote positive effects.

The assessment considers the following aspects of the environment:

a. Air Quality and Odour;
b. Archaeology;
c. Daylight, Sunlight and Overshadowing;
d. Ecology;
e. Environmental Wind;
f. Ground Conditions and Contamination;
g. Noise and Vibration;
h. Socio-Economics;
i. Transport;
j. Water Resources and Flood Risk; and
k. Visual.

Engagement has been undertaken with organisations through the environmental impact assessment process to agree topic assessment scopes and methodologies and provide input to the design. The environmental impact assessment has informed the design of the Project to ensure that it achieves good environmental design.

Air quality and odour

The air quality and odour effects from the Project have been assessed. Demolition and construction-related activities have the potential to generate dust emissions. However, measures to control dust emissions are set out in the Code of Construction Practice, the result of which would be to reduce the effect of the emissions to negligible levels, rendering remaining effects not significant.

Emissions from vehicles associated with all stages of construction and operation have been assessed and the effect on local air quality was identified as not significant.

The operation of the proposed facility has been assessed in terms of emissions from the Energy Resource Facility chimney and odour from the Energy Resource Facility and Resource Recovery Facility. Design measures would be applied to ensure that effects from emissions from the chimney and odour would be not significant. A human health risk assessment of the replacement facility has also been undertaken, which concludes there would be no significant effects.

Archaeology

The archaeological assessment looks at the potential for archaeological remains across the Application Site and the likelihood of these being disturbed by the Project works, for example, through building works such as deep foundations. This assessment concluded that with the implementation of the measures set out in the Code of Construction Practice, effects would not be significant.

Daylight, sunlight and overshadowing

For this topic, it was concluded that there would be no significant effects at nearby properties and open spaces due to the distance from these to the proposed buildings on the Edmonton EcoPark.

EcoPark House has also been assessed and has demonstrated adequate daylight and sunlight levels for those using it.

Ecology

In terms of ecology, there would be a temporary significant negative effect associated with the loss of bird breeding habitat on the temporary laydown and construction area. The implementation of the Code of Construction Practice would prevent any other significant effects arising from the construction and demolition works associated with the Project.

The Project includes landscaping and enhancements such as brown and green roofs on some buildings on the Edmonton EcoPark. The Project's approach to lighting would avoid and minimise light pollution of protected habitats so effects would be not significant. Bat and bird boxes would also be provided.

Environmental wind

The environmental wind assessment considers the wind effects of the Project on pedestrians in terms of their comfort and safety on the Edmonton Ecopark and in adjacent areas. Particular focus has been given to leisure uses to the east of the Application Site, including the use of the area around EcoPark House by the Edmonton Sea Cadets.

The assessment concluded that there would be no significant effects from environmental wind as a result of the Project on areas outside of the Application Site boundary.

On the Edmonton EcoPark itself, there was the potential for poor wind conditions at two locations where pedestrian paths pass the proposed Energy Recovery Facility. Design measures such as screens or canopies would be incorporated during the detailed design stage to ensure that the effects would be not significant.

Ground conditions and contamination

An assessment has been undertaken of the effects on ground conditions of the potential for contamination at the Application Site. In particular the potential for the Project to affect the water quality of groundwater beneath the Application Site and in the adjacent Salmon's Brook have been assessed.

Measures have been set out in the Code of Construction Practice to ensure that groundwater would not be affected and that building works such as deep foundations do not create routes through the ground which may lead to pollution of groundwater. For this reason, the bunker has been carefully positioned to avoid this risk by placing it in the area with the greatest thickness of London Clay, which acts as a barrier protecting the groundwater.

With these measures in place, there would be no significant negative effects relating to ground conditions and contamination.

Noise and vibration

Demolition and construction-related activities associated with the Project have been considered in terms of their potential to result in noise or vibration effects on people or the environment. This concluded that due to the distance from noise and vibration generating activities there would be no significant effects.

Noise from traffic associated with all stages of construction and operation would not be perceptible and therefore not significant.

The Project would be designed to comply with noise limits, which would be controlled and monitored by the Environment Agency. The effects of operational noise would therefore be not significant.

Socio-economics

The socio-economics assessment has considered the effects of the Project on local employment and the Edmonton Sea Cadets.

The Edmonton Sea Cadets would be temporarily relocated within the Edmonton EcoPark while EcoPark House is constructed. This temporary disruption to their access to the water would be not significant. Once relocated into EcoPark House, the Sea Cadets would be provided with improved facilities that include a launch into the River Lee Navigation. EcoPark House could also be used by other community groups.

Construction employment associated with the Project would generate approximately 2,600 full-time jobs across the UK, including approximately 485 on-site construction jobs, resulting in a significant benefit.

Once fully operational, there would be a reduction in on-site employment but this is unlikely to substantially change the level of employment in the local area from current conditions. The effects are therefore considered to be not significant.

Transport

The transport assessment considers the effects of the Project on road users, public transport users, pedestrians, cyclists and equestrians in the vicinity of the Application Site, including those travelling to and from homes and workplaces. The assessment takes account of both construction and operation vehicle movements, and the access points to the Application Site. Both temporary and permanent effects are therefore considered.

While the Project would increase traffic during both the construction and operational stages on the local road network and there would be increased passenger numbers on local public transport, with the measures set out in the Code of Construction Practice and Travel Plans, all effects are considered to be not significant.

Water resources and flood risk

The water resources assessment looks at effects on flood risk, groundwater flows, pollution of water bodies and demands for water supply and wastewater disposal. During construction, measures set out in the Code of Construction Practice would ensure that there would be no significant effects.

The design of the Project takes into account drainage requirements from the Edmonton EcoPark to ensure that it would not give rise to increased flood risk. In addition, an Operational Management Plan would be developed to ensure that activities on the Edmonton EcoPark would not affect water quality.

General potable water demand (i.e. water of drinking water standard) at the Edmonton EcoPark would also increase but in the context of London water availability, this would not be significant. Additionally, rainwater harvesting and other water efficiency measures would be implemented to reduce water demands.

Visual

The effects of the Project on views to and across the Edmonton EcoPark have been assessed. As described on page 6, the Project has been designed to minimise visual impacts.

Construction and decommissioning would give rise to significant negative effects. These would occur on views both close to and at a distance from the Application Site where the construction works would be visible. Effects would however be temporary in nature.

The proposed Energy Recovery Facility would be noticeably larger than the existing buildings on the Application Site and neighbouring industrial units. During Stage 2 when both the proposed Energy Recovery Facility and existing Energy from Waste plant would be present on the Edmonton EcoPark, this would give rise to significant adverse effects on views from a number of locations due to the increase in bulk and mass on the Application Site.

Following the removal of the existing Energy from Waste facility, the visibility of the proposed Energy Recovery Facility would be reduced in comparison to the existing Energy from Waste facility. In particular the colour and shape of the chimney would make it less visible on the skyline than the existing one. Effects from all views are then considered to be not significant.

In relation to the significant adverse effects that would arise from the necessary scale of the works and the structures that form the Project, there are no measures that can be applied to reduce the effects.

Cumulative assessment

By the time construction of the Project starts, it is possible that other developments not currently present may be under construction or possibly already built. The potential for these developments together with the proposed North London Heat and Power Project to have an increased ‘cumulative’ effect on the environment has been assessed. The conclusion from this is that the effects of the Project on the environment remain the same when taking account of other developments.

6. HOW TO FIND OUT MORE

The Environmental Statement, Environmental Commitments and Mitigation Schedule and other Development Consent Order application documents can be viewed online at www.northlondonheatandpower.london.

Series 06 Environmental Statement

NORTH LONDON WASTE AUTHORITY
1b Berol House, 25 Ashley Road
Tottenham Hale
N17 9LJ

Telephone: 020 8489 5730
Fax: 020 8365 0254
Email: project@northlondonheatandpower.london