

C/7/2016/7008: Morningthorpe Closed Landfill Site, Chestnut Loke, Morningthorpe

**Installation and operation of a small scale electricity generation plant:
Executive Director of Community & Environmental Services, Norfolk
County Council**

Report by the Executive Director of Community and Environmental Services

Summary

Planning permission is sought for installation and operation of a small scale electricity generation plant fuelled by landfill gas.

Landfill gas produced at this site is currently managed by burning to atmosphere. The application would enable the recovery of energy in the form of electricity from a non-fossil fuel source.

The environmental impacts of the proposal have been carefully considered. No objections have been received from statutory or non-statutory consultees, or from any other third parties.

The proposal accords with the development plan. It is recommended that temporary conditional planning permission is granted for 20 years.

In accordance with the Council's Constitution, the application is being reported to the Planning (Regulatory) Committee because it has been made on behalf of the Executive Director of Community and Environmental Services.

Recommendation

It is recommended that the Executive Director of Community and Environmental Services be authorised to:

- (i) Grant planning permission subject to the conditions outlined in section 12.
- (ii) To discharge conditions (in discussion with the Chairman and Vice Chairman of the committee) where those detailed above require the submission and implementation of a scheme, or further details, either before development commences, or within a specified date of planning permission being granted.
- (iii) Delegate powers to officers (in discussion with the Chairman and Vice Chairman of the committee) to deal with any non-material amendments to the application that may be submitted.

1. The Proposal

- 1.1 Location : Morningthorpe Closed Landfill Site, Chestnut Loke, Morningthorpe
- 1.2 Type of development :
 - Landraising of some 44m² of the closed landfill to provide a level platform extension of the existing gas management compound, with ramped access;
 - Installation and operation of a small scale electricity generation plant
- 1.3 Site area : Original submission:
0.2323 hectare
- Subsequent extension, (so as to include all land necessary for export of power to adjacent HWRC and inert waste recycling facility):
0.3777 hectare
- 1.4 Duration : 20 years.
- 1.5 Plant / Buildings :
 - Steel ISO Shipping Container (12.2m (l) x 2.89m (h) x 2.44m (w))
 - either: four no. Stirling Engines; or single, small scale spark-ignition engine;
 - Pump to divert gas
- 1.6 Hours of working : Installation and commissioning works
07:30 – 18:00 Monday – Friday
Operation of electricity generation plant
24 hours per day, 365 days per year
Routine maintenance
07:30 – 18:00 Monday – Friday
- 1.7 Vehicle movements and numbers : Delivery of inert materials for proposed landraising operations
Two deliveries by HGV
- Delivery of generation plant
By rigid bodied flat-bed HGV
- Servicing of generation plant
Estimated two to four light vehicle movements per week.

- 1.8 Access : Via existing site access to B1527 (Hempnall Road)
- 1.9 Landscaping :
 - Existing screening vegetation;
 - No landscaping proposed

2. Constraints

- 2.1 The following constraints apply to the application site:
- 2.2 The site is identified in the South Norfolk Local Plan Policies Map 2015 as being located outside any defined development limit and within a River Valley.
- 2.3 A public footpath (Morningthorpe FP2) runs south from opposite the site entrance and a public footpath (Morningthorpe FP 34), a component part of Norfolk Trail Boudicca's Way, runs to the west of the site.
- 2.4 The site is located within Groundwater Protection Zone 3.
- 2.5 The site is located approximately 4km southeast of Flordon Common SSSI being a component part of the Norfolk Valley Fens Special Area of Conservation (SAC).
- 2.6 The site is located approximately 2km northwest of Fritton Common SSSI
- 2.7 Fritton Grange Meadows County Wildlife Site (CWS 100) is located some 0.6km east of the site.

3. Planning History

- 3.1 There have been a number of planning permissions relating to operations on the wider site, namely those concerning the mineral extraction and landfill operations. The landfill site was operational between 1981 and 1990. For the purposes of this proposal, the following planning history is relevant:
- 3.2 **C/1992/7004** – Landfill Gas Environmental Control Scheme – permission granted 22 October 1992

4. Planning Policy

- 4.1 Norfolk Minerals and Waste Local Development Framework Core Strategy and Minerals and Waste Development Management Policies Development Plan Document 2010-2026 (2011) :

CS13	Climate change and renewable energy generation
CS14	Environmental protection
CS15	Transport
DM1	Nature conservation
DM3	Groundwater and surface water
DM4	Flood risk
DM7	Safeguarding Aerodromes
DM8	Design, local landscape and townscape character
DM10	Transport

			DM11	Sustainable construction and operations
			DM12	Amenity
			DM13	Air Quality
			DM14	Progressive working, restoration and after-use
4.2	Norfolk Minerals and Waste Development Framework Waste Site Specific Allocations DPD (2013)	:		No site specific policies or allocations of direct relevance to the proposed development.
4.3	Joint Core Strategy for Broadland, Norwich and South Norfolk (2011/2014)	:	Policy 1	Addressing climate change and protecting environmental assets
			Policy 2	Promoting good design
			Policy 3	Energy and water
4.4	South Norfolk Local Plan Development Management Policies DPD (2015)	:		Policy DM 1.1 Ensuring development management contributes to achieving sustainable development in South Norfolk
				Policy DM 1.3 The sustainable location of new development
				Policy DM 1.4 Environmental quality and local distinctiveness
				Policy DM 3.8 Design Principles
				Policy DM 3.11 Road safety and free flow of traffic
				Policy DM 3.13 Amenity, noise and quality of life
				Policy DM 3.14 Pollution, health and safety
				Policy DM 4.1 Renewable Energy
				Policy DM 4.2 Sustainable drainage and water management
				Policy DM 4.5 Landscape Character and River Valleys
4.5	Neighbourhood Development Plan	:		The area in which the planning application is located does not have an adopted Neighbourhood Development Plan.
4.6	The National Planning Policy Framework (2012)	:		Section 7: Requiring good design
				Section 10: Meeting the challenge of climate change, flooding and coastal

change

Section 11: Conserving and enhancing
the natural environment

4.7 Planning Practice :
Guidance Suite (2014)

4.8 National Planning Policy :
for Waste (2014)

5. Consultations

5.1 South Norfolk Council : No objection.

5.2 Morningthorpe Parish : No response received
Council

5.3 Environmental Health : Original submission
Officer (South Norfolk
Council)
Our reworking of the calculation methodology
would suggest the noise level at nearest dwellings
is likely to be sufficiently low as to not require a
site specific assessment. Do not feel there are
sustainable grounds to recommend refusal of this
application assuming that:

- The data and information supplied is valid for any electricity generation plant that is constructed on the site (e.g. different plant not being utilised).
- The assumptions on which the calculation is based being valid in this case (e.g. the calculation assumes the noise does not contain any acoustic features that could increase the significance of its impact such as impulses or tones).

Provides advisory comments in relation to installation of external lighting.

Additional noise data (in relation to spark-ignition engine)

Our reworking of the calculation methodology using the data supplied for a spark-ignition engine would suggest the noise level at nearest dwellings could be a cause for concern, exceeding the World Health Organisation “Night noise guidelines for Europe”.

Further noise data (in relation to spark-ignition engine)

Our reworking for this case would suggest the noise level at nearest dwellings is likely to be satisfactory. However, this would appear to be a marginal case with a significant level of uncertainty. Thus, on the basis of the information available we cannot comment with certainty particularly as we do not have any background noise data for the area and no indication as to whether the noise has any component (e.g. a drone) that would increase its annoyance to a level above that indicated by the noise data provided.

In light of the noise data provided I would expect that any noise issues can be practicably addressed. Thus, in the event that installation of a spark-ignition engine is pursued, I would have no objection to the matter of noise being conditioned to require an acoustic assessment to be undertaken to determine the impact of noise from the engine on residents of the area, along with any noise mitigation measures that would be required.

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| 5.4 | Environment Agency | : No objection.
Provide advisory comments in relation to the burning of landfill gas as a fuel, to generate electricity, and the Environmental Permitting (England and Wales) Regulations 2010. |
| 5.5 | UK Power Networks | : No response received |
| 5.6 | Highway Authority (NCC) | : No objection |
| 5.7 | County Ecologist | : No adverse effects on ecology.
Provides advisory comments in relation to timing of works and nesting birds. |
| 5.8 | Landscape and Green Infrastructure Officer | : <u>Original submission</u>
Any landscape or visual effects resulting from this proposal are likely to be negligible due to extensive mature screening.
Considers that the container should be finished in a green or grey colour, to suit site context and enable the proposal to comfortably sit within it's surroundings.
<u>Additional information</u>
Recommends approval |
| 5.9 | Public Rights of Way | : No response received |

- 5.10 Natural England : No objection.
- 5.11 Norfolk Fire and Rescue Service : No response received
- 5.12 Lead Local Flood Authority (LLFA) : Comment that this development is below the LLFA consultation threshold for providing detailed comment. Advise that the CPA should satisfy itself that the application is compliant with:
- paragraph 103 of the NPPF (flood risk);
 - Written ministerial statement - HCWS161 – Sustainable drainage systems
- Further advise that the application should demonstrate how the proposal accords with national standards and relevant guidance. Provides advisory comments in relation to water management.
- 5.13 Local residents : Representation has been received from one local resident in support of the proposal.
- 5.14 County Councillor Ms A M Thomas (Long Stratton) : No response received

6. Assessment

- 6.1 The application is being reported to the Planning (Regulatory) Committee, in accordance with the County Council's Scheme of Delegation, because it has been made on behalf of the Executive Director of Community and Environmental Services.

6.2 Proposal

- 6.3 Planning permission is sought to modify and extend the existing gas management scheme through installation and operation of a small-scale electricity generation plant which would be powered by the landfill gas. The proposal would involve:
- Landraising of some 44m² of the closed landfill adjacent the north east boundary of the existing gas management compound with imported inert material, in order to provide a level platform extension of the existing gas management compound, with ramped access;
 - Installation of an ISO shipping container on the extended gas management compound to house small pump to divert gas and, either four no. 9kWe electrical output Stirling engines or single, small scale spark-ignition engine;
 - Connection of a new gas pipe from the existing gas pipework to the proposed electricity generation plant;

- Removal of existing gas flare

- 6.4 The applicant states that, a flare stack, gas abstraction wells and delivery pipework were installed at Morningthorpe landfill site in the late 1980's. This system has been variously improved and upgraded over the subsequent years. The existing gas flare is located in the north western area of the former landfill site.
- 6.5 The application advises that consideration has previously been given to using the methane gas produced at the site as a source of heat or energy but proposals have so far been unviable. Recent developments in the reliability and cost of small-scale electricity generators, at a time when Renewable Obligation payments for small scale projects have improved, now brings sites such as Morningthorpe into contention.
- 6.6 The proposed container is rectangular in shape, of steel construction, and measures 12.22 metres (L) x 2.44 metres (W) x 2.9 metres (H). Each of the engines has a separate exhaust which would be attached to the exterior of the container and would extend another 0.3m above the roof of the container.
- 6.7 The application advises that the engines can generate electricity 24 hours a day from the available landfill gas on site, which would power parasitic load for the engines themselves and associated landfill gas pumping infrastructure. The majority of power generated on site will be exported into the national grid, through existing network connections and, if possible, surplus power will also be used to power the equipment in the Household Waste Recycling Centre, to the south west of the site and inert waste recycling facility, to the north.
- 6.8 The applicant states that, the generation plant would divert all of the abstracted gas that is currently combusted in the existing gas flare. Consequently, the gas flare will no longer be required and will be removed from site.
- 6.9 Eventually the site will cease producing landfill gas at a level that needs to be managed. Given the nature of landfill sites, this timescale is very difficult to predict. The applicant has applied to retain the engine(s) on site for 20 years.
- 6.10 As detailed above, it is proposed to install either four Stirling engines or a single spark-ignition engine. The applicant states that the proposed Stirling engines operate by cyclic compression whereas the spark-ignition engine is an internal combustion engine. The application adds that Stirling engines are more efficient at combustion than internal combustion engines but that the choice of technology will be determined by financial and qualitative factors.
- 6.11 **Site**
- 6.12 The application site relates to Morningthorpe Closed Landfill Site, located some 1.5km southeast of the village of Tasburgh, with Hempnall some 1.9km to the east. The site occupies a position on a plateau above the valley of a small tributary of the River Tas, to the north.

- 6.13 The application site comprises of the existing fenced, gas management compound located in the north western area of the closed landfill site, currently accommodating a flare stack and small, electrical controls building, an adjoining area of the closed landfill abutting the north east and south east boundaries of the compound and the existing access road.
- 6.14 The application site is bounded to the south and east by the closed landfill, to the west by a former mineral working and to the north by a former mineral working currently used for inert waste recycling and being progressively restored through landfilling with inert materials. Vehicular access to the application site is gained via an existing part surfaced / part unmade access road leading onto the B1527 (Hempnall Road), some 1.3km east of its junction with the A140. This access also serves a Household Waste Recycling Centre and the inert waste facility.
- 6.15 The nearest residential property is at Hall Farm some 230m to the south east of the gas management compound.
- 6.16 Amended site location
- 6.17 Subsequent to validation of the application, and consultation/notification of the proposal, it came to light that the original application site did not include all land necessary for export of power from the generation plant to the adjacent Household Waste Recycling Centre and inert waste recycling facility. The applicant took the decision to amend the application site boundary so as to include all land necessary to carry out the proposed development. The amended application boundary now includes additional adjoining land to the northwest and southwest of the proposed extended compound.
- 6.18 As to whether the red line boundary of a planning application can be changed, it has been established that Ministerial advice on this subject is that it is sensible and time saving to allow applicants for planning permission to amend details of applications provided the amendments do not materially change the character of the development.
- 6.19 Similarly, Case Law has held that a pragmatic approach was appropriate when a local planning authority were considering amendments to a planning application. The question should be whether the change is so substantial that the application can only be considered fairly and appropriately, bearing in mind both the interest of the applicant and potentially interested members of the public, by requiring a fresh application to be lodged.
- 6.20 Whilst the area of the application site has increased slightly, given that:
- the nature, scope and character of the proposal is not changed in a material way;
 - as will be demonstrated, the impact of the proposal on the locality is not changed in a material way, (the increased area will not increase visual impact, there is no increase in the volume of material to be imported and the amendment does not generate any additional traffic),
- it was concluded that the changes do not materially alter the basis of the proposal as was originally the subject of advertising. To this end, a fresh application was not requested by the CPA. The proposed amendments have

been the subject of further consultation and notification.

6.21 Principle of development

- 6.22 A basic principle when assessing planning applications is outlined in Section 38(6) of the Town and Country Planning Compulsory Purchase Act 2004 which states:

“if regard is to be had to the development plan for the purpose of any determination to be made under the Planning Acts, the determination must be made in accordance with the plan unless material considerations indicate otherwise”.

- 6.23 In terms of the development plan, the County Planning Authority considers the relevant documents in relation to this application are the policies in the adopted Norfolk Minerals and Waste LDF: Core Strategy 2010-2026 (2011), the adopted NMWDF Waste Site Specific Allocations DPD (2013), the adopted Joint Core Strategy for Broadland, Norwich and South Norfolk (2011/2014), and the South Norfolk Local Plan Development Management Policies DPD (2015). Whilst not part of the development plan, policies within the National Planning Policy Framework (NPPF) are also a further material consideration of potentially significant weight as well as the National Planning Policy for Waste (2014).
- 6.24 The proposed site has not been allocated in the NMWDF Waste Site Specific Allocations DPD.
- 6.25 The South Norfolk Local Plan Policies Map identifies the application site as being located outside any defined development limit and within an area designated as *River Valley*.
- 6.26 Policy DM 1.3 of the South Norfolk Local Plan Development Management Policies DPD states that outside of the defined development boundaries of settlements, development proposals will only be permitted where specific Development Management Policies allow for development outside of development boundaries. Policy DM 4.1 of the SNLP Development Management Policies DPD supports proposals for renewable energy generating development other than wind energy, subject to an assessment of its impacts.
- 6.27 Policy CS13 of the NMWLDF states that, *‘All new residual waste treatment plants and any new non-hazardous landfill sites will need to generate electricity and/or capture heat, unless it can be demonstrated that this is not practicable.’*
- Whilst this application does not seek permission for a new landfill site, the principle of this policy is to encourage the production of electricity and/or heat capture from sites such as this. Permission for landfilling at this site was granted several years ago when this policy was not in existence. This application and the proposals set out above are considered to be in full accordance with the aims of this policy which supports the production of electricity from landfill gas, which is currently being disposed of by flaring.
- 6.28 The *NPPF* supports sustainable development, which seeks to meet the challenge of climate change, through supporting the delivery of renewable and low carbon

energy and associated infrastructure.

6.29 *National Planning Policy for Waste* supports sustainable waste management in appropriate locations where there is no unacceptable impact upon neighbouring amenities.

6.30 Therefore, subject to an assessment of its impacts, the development proposals are not considered to be contradictory to the provisions of the development plan, the *NPPF* and *National Planning Policy for Waste*, and it is therefore considered that the principle of this use could be acceptable at this location and would not be out of character for the immediate area.

6.31 **Amenity / Air Quality**

6.32 The proposals involve the installation of plant, namely a maximum of four engines and a pump, which would operate continuously. The application is accompanied by a Noise Assessment prepared to assess the noise impact on the amenities of nearest residential properties of a proposed small-scale electricity generating plant, comprising of two Stirling engines and small pump inside a shipping container, at a former landfill site in Suffolk. The assessment concludes that the proposed plant is unlikely to cause disturbance to residential neighbours.

6.33 As regards the Stirling engines, the application is also accompanied by the manufacturer's technical data which details that noise emissions from the engine would be 67dB(A) at a distance of 1m. As regards the spark-ignition engine, the applicant initially advised that noise emissions from the engine would be 75dBA at 7m. During the application process additional details relating to noise emissions from the proposed spark-ignition engine were requested. The applicant has since advised that noise emissions from the engine would be 65dBA at 10m.

6.34 As regards air quality, the application states that Nitrogen Oxide and Carbon Dioxide would be emitted through the combustion process, whilst the manufacturer's technical data for the Stirling engine also detail that Carbon Monoxide would be emitted. The supporting statement adds that, since gas production from the landfill site is ever decreasing, the emissions to air will continue to reduce over time.

6.35 As regards lighting, the proposal includes an additional external floodlight mounted on the container for emergency out-of-hours access.

6.36 Para. 109 of the *NPPF* is clear that the planning system should prevent new development from contributing to unacceptable levels of pollution. Both the *NPPF* (Para 122) and *National Planning Policy for Waste* underline that planning authorities should focus on whether the development itself is an acceptable use of the land, and the impact of the use, rather than the control of processes or emissions themselves where these are subject to approval under pollution control regimes. Therefore, the CPA needs to be satisfied planning permission can be granted on land use grounds taking full account of environmental impacts, and that potential releases can be adequately regulated under the

pollution control framework.

- 6.37 The Environment Agency (EA), has been consulted on this application and has raised no objection to the development. The EA comment that burning of landfill gas as a fuel, to generate electricity, is an activity that requires an Environmental Permit unless the operator can comply with low risk waste position LRW 546. It is recommended that the EA's advice be attached as an informative on any grant of planning permission.
- 6.38 The applicant has since advised that the proposal would comply with low risk waste position LRW 546.
- 6.39 The EHO has been consulted on this application and has confirmed that, whilst the noise data supplied for the spark-ignition engine would suggest the noise level at nearest dwellings is likely to be satisfactory, on the basis of the information available, the EHO cannot comment with certainty. In light of the noise data provided, the EHO would expect that any noise issues can be practicably addressed. The EHO recommends a condition be imposed to require an acoustic assessment to be undertaken in the event that the applicant decides to install a spark-ignition engine to determine the impact of noise from the engine on residents of the area, along with any noise mitigation measures that would be required.
- 6.40 Both the EA and EHO are satisfied in principle that an electricity generation plant at the location under consideration could reasonably be expected to meet the noise limits required. Given that an Environmental Permit may not be required for the development and the uncertainty over the noise impact arising from the spark-ignition engine, it is considered reasonable to impose the condition recommended by the EHO on any grant of planning permission.
- 6.41 As regards possible noise mitigation measures, the EHO has advised that if required these could include one or more of the following:
- Sourcing quieter plant;
 - Orientation – e.g. having the ventilation louvres (and any other dominant noise sources) facing away from residential premises;
 - Acoustic enclosures to noisy plant in the container;
 - Acoustic louvres;
 - Acoustic silencers to exhausts and air intakes if required;
 - Acoustic insulation to the container;
 - Acoustic barrier / bund.
- 6.42 In the event that an acoustic barrier / bund is necessary, separate planning permission would be required, on the basis that it would constitute operational development in its own right. It is recommended that this requirement be drawn to the attention of the applicant as an informative on any grant of planning permission.

6.43 Given the above, it is considered that the development will not result in unacceptable impact to local amenity and would not impact negatively on air quality. Subject to the aforementioned condition, it is considered therefore that the proposal is in accordance with NMWLDF Policies CS14, DM12, DM13 and DM15, SNLP DM Policies DPD policies DM 3.13 and DM 3.14, and requirements of the NPPF.

6.44 **Landscape and Design**

6.45 The application site is within the boundary of a Closed Landfill Site in a countryside location, at which landfill gas is currently being abstracted and disposed of by flaring. The site is identified in the South Norfolk Local Plan Policies Map 2015 as being located within an area designated as *River Valley*. The site is also located some 100m east of Norfolk Trail: Boudicca's Way.

6.46 The development involves extension of an existing gas management compound and installation of electricity generation plant, enclosed by metal fencing. The proposal provides for the removal of the existing 7m high gas flare stack from the site. No trees will be lost as a result of the proposed development and no new planting will be implemented. The supporting statement submitted with the application concludes that, the proposed development is hidden either by topography or tree screening and will produce no adverse impacts on environmental assets.

6.47 The application site benefits from existing established landscaping around the perimeter of the closed landfill. Whilst the proposed development would occupy a larger footprint than the existing flare at the site, it is lower in height than the existing flare and would have little impact upon the appearance of the site from outside of its boundaries. From inspection of the site and having given consideration to the scale and form of the proposed development, it is considered that the findings of the supporting statement are reasonable.

6.48 Policy DM8 of the NMWLDF CS requires new development to promote good design. The proposed plant is of a functional design in keeping with its purpose and whilst the development cannot be considered 'good design', the design is considered to be reflective of this form of development. The industrial appearance of the development would also complement the existing buildings within the compound itself, neighbouring HWRC and inert waste recycling facility. Given that the proposed development would be sited at a fairly low level within the closed landfill, the proposal utilises the existing access and, given existing established screening, it is therefore considered that the design of the proposal is acceptable in the context of the site and there will be no material harm caused to the character and quality of the local area. South Norfolk Council raises no objection to the scheme on landscape or design grounds. Therefore it is considered these are material considerations that outweigh the issue with policy DM8.

6.49 Whilst not raising objection to the proposal in principle, the Council's Green Infrastructure Officer recommended that the container should be finished in a green or grey colour, to enable the proposal to comfortably sit within its

surroundings. Negotiations have taken place throughout the determination process and the applicant has since confirmed that the container will be coloured green.

6.50 Given that permission is sought to extend the existing gas management compound for a temporary period, it is considered reasonable to impose a planning condition in relation to restoration of the site.

6.51 It is therefore considered, on balance, that subject to the aforementioned condition, the impact on visual amenity and landscape would not be such as to be unacceptable when considered against the requirements of Policies CS14 and DM8 of the NMWLDF, Policy 2 of the JCS, SNLP Development Management Policies DPD policies DM 1.4, DM 3.8 and DM 4.5, and Government's objectives of the NPPF.

6.52 **Biodiversity**

6.53 The proposal is not accompanied by an Ecology Report. The site is located some 4km from Flordon Common SSSI, being a component part of The Norfolk Valley Fens SAC, and one County Wildlife Site is located some 0.6km east of the site. The habitats present within the site comprise of areas of grassland, consolidated aggregates and hardstanding.

6.54 Natural England has been consulted on the application and has raised no objections. The Council's Ecologist has been consulted on the application and has raised no concerns. It is recommended that the Ecologist's advisory comments in relation to protection of nesting birds be attached as an informative on any grant of planning permission.

6.55 The development is therefore considered to be compliant with NMWLDF policies CS14 and DM1, and objectives of the NPPF.

6.56 Appropriate Assessment

The application site is within 5km of The Norfolk Valley Fens SAC, which is a European protected habitat. The application has been assessed in accordance with Regulation 61 of the Conservation of Habitats and Species Regulations 2010 and based on the information submitted to the County Planning Authority (CPA) it is considered that the development does not have a significant impact on the integrity of any protected habitat. Accordingly, there is no requirement for the CPA to undertake an Appropriate Assessment of the development.

6.57 **Transport**

6.58 The site will be accessed via an existing access road leading onto the B1527. The proposals would generate very little additional traffic. The application advises that the landraising operations and installation of the plant would require delivery to the site by HGV. Subsequent operation and maintenance is likely to generate two to four light vehicle movements per week. The Highway Authority has been consulted on the application and raises no objection.

6.59 Given the above, the development is considered compliant with the principles of Policies CS15 and DM10 of the NMWLDF Core Strategy, SNLP Development Management Policies DPD Policy DM 3.11, and the government objectives of the NPPF.

6.60 **Sustainable construction and operations**

6.61 The application involves installation of electricity generation plant which, subject to maintenance, will not be in need of regular replacement. It is therefore considered that there is no conflict with NMWLDF policy DM11 and the NPPF.

6.62 **Climate change and renewable energy generation**

6.63 Landfill gas produced at this site is currently burned to atmosphere in a flare stack. The sustainability statement states that non-renewable sources of energy are used to power the flare. The application details that, burning reduces the quantity of damaging methane lost to the atmosphere and replaces the methane with less harmful carbon dioxide. However, heat energy released in the combustion process is lost. The proposal would continue to convert methane into less harmful carbon dioxide and would also recover energy in the form of electricity from a non-fossil fuel source. The Sustainability Statement adds that, installation of the plant will enable electricity to be generated 24 hours a day from the available landfill gas on site.

6.64 It is therefore considered taking into account the above, that the development is compliant with NMWLDF Policy CS13, JCS Policies 1 and 3, Policy DM 4.1 of the SNLP Development Management Policies DPD, and requirements of the NPPF.

6.65 **Flood risk**

6.66 The site lies within Flood Zone 1, which is an area at low risk of flooding, and outside the flow path of the Environment Agency Updated Flood Map for Surface Water (1 in 30yr and 1 in 100yr event).

6.67 The existing gas management compound contains a concrete hardstanding upon which the existing flare stack and electrical controls building are sited. The proposed operational development includes extension of the existing compound through landraising of some 44sq metres of the closed landfill with inert material and installation of a shipping container. It is proposed that the extended compound would be surfaced with Type 1 aggregate or similar. As regards surface water run-off, the application proposes that this will be managed via natural infiltration.

6.68 The Lead Local Flood Authority have been consulted on the application and comment that, the CPA should satisfy itself that the application is compliant with: para 103 of the NPPF, which requires that, when determining planning applications, LPAs should ensure flood risk is not increased elsewhere; and Written ministerial statement - HCWS161, which expects that decisions on planning applications relating to major development ensure that sustainable

drainage systems for the management of run-off are put in place, unless demonstrated to be inappropriate. The LLFA further advises that the applicant should also demonstrate how the proposal accords with national standards and relevant guidance.

Planning Practice Guidance (Flood Risk and Coastal Change – what sort of sustainable drainage system should be considered?, paragraph 080), sets out that, the aim should be to discharge surface run off as high up the hierarchy of drainage options as reasonably practicable, with ‘into the ground (infiltration)’ at the top of the hierarchy.

6.69 Notwithstanding that Type 1 aggregate is an impermeable surface, given the small scale of the proposed extension it is considered, that the development would not materially increase the risk of flooding. Given the above, it is considered that there is no conflict with NMWLDF Policies CS13 and DM4, JCS Policy 1, Policy DM 4.2 of the SNLP Development Management Policies DPD, and the NPPF.

6.70 Groundwater and surface water

6.71 The site is located within Groundwater Protection Zone 3, (defined by the Environment Agency (EA) as, the area around a source within which all groundwater recharge is presumed to be discharged at the source). The EA has been consulted on this application and raises no objection, in relation to groundwater / surface water quality and resources.

6.72 Accordingly, the development is considered to be compliant with Policy DM3 of the NMWLDF Core Strategy, JCS Policy 1, Policy DM 3.14 of the SNLP DM Policies DPD, and the requirements of the NPPF.

6.73 Progressive working, restoration and after-use

6.74 The proposal is for installation and operation of a small scale electricity generation plant within an extended gas management compound at a closed landfill site, for 20 years. If the landfill gas at the site still needs to be managed beyond that timescale, a further planning application would need to be submitted for the chosen technology for a further period of time.

6.75 Planning permission reference C/92/7004 is subject to a restoration condition which requires removal of the gas flaring infrastructure and restoration with imported top soil. Given that permission is sought for an extension to the existing compound and installation of alternative infrastructure it is considered reasonable to impose a condition as part of any consent granted that would require submission of an appropriate restoration scheme that would be implemented after the removal of the infrastructure.

6.76 Subject to the aforementioned condition, it is considered that the proposal complies with NMWLDF CS Policy DM14, and the objectives of the NPPF.

6.77 Responses to the representations received

6.78 The application was advertised by means of neighbour notification letters, site notice, and an advertisement in the Eastern Daily Press newspaper.

6.79 Representation was made by one local resident in support of the application.

7. Resource Implications

7.1 **Finance:** The development has no financial implications from the Planning Regulatory perspective.

7.2 **Staff:** The development has no staffing implications from the Planning Regulatory perspective.

7.3 **Property:** The development has no property implication from the Planning Regulatory perspective.

7.4 **IT:** The development has no IT implications from the Planning Regulatory perspective.

8. Other Implications

8.1 Human rights

8.2 The requirements of the Human Rights Act 1998 must be considered. Should permission not be granted Human Rights are not likely to apply on behalf of the applicant.

8.3 The human rights of the adjoining residents are engaged under Article 8, the right to respect for private and family life and Article 1 of the First Protocol, the right of enjoyment of property. A grant of planning permission may infringe those rights but they are qualified rights, that is that they can be balanced against the economic interests of the community as a whole and the human rights of other individuals. In making that balance it may also be taken into account that the amenity of local residents could be adequately safeguarded by conditions albeit with the exception of visual amenity. However, in this instance it is not considered that the human rights of adjoining residents would be infringed.

8.4 The human rights of the owners of the application site may be engaged under the First Protocol Article 1, that is the right to make use of their land. An approval of planning permission may infringe that right but the right is a qualified right and may be balanced against the need to protect the environment and the amenity of adjoining residents.

8.5 Equality Impact Assessment (EqIA)

8.6 The Council's planning functions are subject to equality impact assessments, including the process for identifying issues such as building accessibility. None have been identified in this case.

- 8.7 **Legal Implications:** There are no legal implications from the Planning Regulatory perspective.
- 8.8 **Communications:** There are no communication issues from a planning perspective.
- 8.9 **Health and Safety Implications:** There are no health and safety implications from a planning perspective.
- 8.10 **Any other implications:** Officers have considered all the implications which members should be aware of. Apart from those listed in the report (above), there are no other implications to take into account.

9. Section 17 – Crime and Disorder Act

- 9.1 It is not considered that the implementation of the proposal would generate any issues of crime and disorder, and there have been no such matters raised during the consideration of the application.

10. Risk Implications/Assessment

- 10.1 There are no risk issues from a planning perspective.

11. Conclusion and Reasons for Grant of Planning Permission

- 11.1 Planning permission is sought for installation and operation of a small scale electricity generation plant powered by landfill gas.
- 11.2 Landfill gas produced at this site is currently managed by burning to atmosphere. The application would enable the recovery of energy in the form of electricity from a non-fossil fuel source.
- 11.3 The environmental impacts of the proposal have been carefully considered. No objections have been received from statutory or non-statutory consultees, or from any other third parties.
- 11.4 The proposed development is therefore considered to be acceptable, accords with the development plan, and there are no other material considerations why it should not be permitted. Accordingly, temporary conditional planning permission is recommended.

12. Conditions

- 12.1 The development hereby permitted shall commence not later than three years from the date of this permission.

Reason:

Imposed in accordance with Section 91 of the Town and Country Planning Act 1990, as amended by Section 51 of the Planning and Compulsory Purchase Act

2004.

- 12.2 This permission shall expire after a period of 20 years from the date of this permission, or when the maximum concentration of flammable gas in the landfill gas within the waste is below 1% by volume and carbon dioxide is below 0.5% by volume over a 24 month period measured on at least 4 separate occasions spread over that period, whichever is the sooner. Unless on or before that date permission is granted for the retention of the gas control system for a further period:

- a) the engines and associated building, any infrastructure installed for their accommodation, and abstraction wells and pipes shall be removed;
- b) the said land shall be restored in accordance with condition 4 of this planning permission.

Reason:

To ensure the proper and expeditious restoration of the site, in accordance with Policy DM14 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

- 12.3 The development must be carried out in strict accordance with the application form, plans and documents as submitted.

Reason: For the avoidance of doubt and in the interests of proper planning

- 12.4 In the event that a spark-ignition engine is to be installed, no development shall take place until an acoustic assessment has been submitted to and approved in writing by the County Planning Authority. The assessment shall include:

- a) prediction of the impact of noise from the development on the residents of the area;
- b) details of any noise mitigation measures that would be required

The assessment shall have been made in accordance with British Standard, BS 4142:2014 "Methods for rating and assessing industrial and commercial sound" and World Health Organisation guidelines.

The development hereby permitted shall be implemented in accordance with the approved details prior to the electricity generation plant becoming operational and shall thereafter be operated in accordance with the approved details.

Reason:

To protect the amenities of residential properties and the surrounding area, in accordance with Policy DM12 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

- 12.5 Within six months of the date of this permission, a scheme of restoration shall be submitted to and approved in writing by the County Planning Authority. The said scheme shall include details of:

- a) the contours of the restored land shown by plans and sections;

- b) the depth of topsoil and subsoil;
- c) the provision to be made for drainage of the site;
- d) areas to be seeded or planted with trees, including provision for re-seeding and re-planting during the following planting season where such action is necessary as a result of any failure which occurs within a period of five years from the date of initial planting;
- (e) details of seed mix and tree species to be planted;

Reason:

To ensure the proper and expeditious restoration of the site, in accordance with Policy DM14 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

- 12.6 No plant or machinery shall be used on the site unless it is maintained in a condition whereby it is efficiently silenced in accordance with the manufacturer's specifications.

Reason:

To protect the amenities of residential properties and the surrounding area, in accordance with Policy DM12 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

- 12.7 Any drums and small containers used for oil and other chemicals on the site shall be stored in bunded areas which do not drain to any watercourse, surface water sewer or soakaways, and all oil or chemical storage tanks, ancillary handling facilities and equipment, including pumps and valves, shall be contained within an impervious bunded area of at least 110% of the total stored capacity.

Reason: To safeguard hydrological interests, in accordance with Policy DM3 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

Recommendation

It is recommended that the Executive Director of Community and Environmental Services be authorised to:

- (i) Grant planning permission subject to the conditions outlined in section 12 above.
- (ii) To discharge conditions (in discussion with the Chairman and Vice Chairman of the committee) where those detailed above require the submission and implementation of a scheme, or further details, either before development commences, or within a specified date of planning permission being granted.
- (iii) Delegate powers to officers (in discussion with the Chairman and Vice Chairman of the committee) to deal with any non-material amendments to the application that may be submitted.

Background Papers

Appendix 1: Morningthorpe Location Plan

Appendix 2: Morningthorpe Site Plan

Appendix 3: Norfolk Minerals and Waste Local Development Framework Core Strategy and Minerals and Waste Development Management Policies Development Plan Document 2010-2016 (2011)

Appendix 4: Norfolk Minerals and Waste Development Framework Waste Site Specific Allocations DPD (2013)

Joint Core Strategy for Broadland, Norwich and South Norfolk (2011/2014)

http://www.south-norfolk.gov.uk/planning/media/1_Adopted_Joint_Core_Strategy_January_2014.pdf

South Norfolk Local Plan Development Management Policies Document (2015)

http://www.south-norfolk.gov.uk/planning/media/Development_Management_Policies_Document.pdf

The National Planning Policy Framework (2012)

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf

Planning Practice Guidance Suite (2014)

<http://planningguidance.planningportal.gov.uk/>

National Planning Policy for Waste (2014)

<https://www.gov.uk/government/publications/national-planning-policy-for-waste>

Officer Contact

If you have any questions about matters contained in this paper please get in touch with:

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If you need this report in large print, audio, Braille, alternative format or in a different language please contact 0344 800 8020 and ask for Andrew Harriss or textphone 0344 800 8011 and we will do our best to help.