

DR/25/14

committee DEVELOPMENT & REGULATION

date 25 July 2014

MINERALS AND WASTE

Proposal: **Installation of a 1000 Kilowatt (kWe) environmental flare compound comprising Gas Plant, Generator, storage tanks, transformer, Switch and meter room and associated close boarded and palisade fencing.**

Location: **Slough Lane, Ardleigh, CO7 7RU**

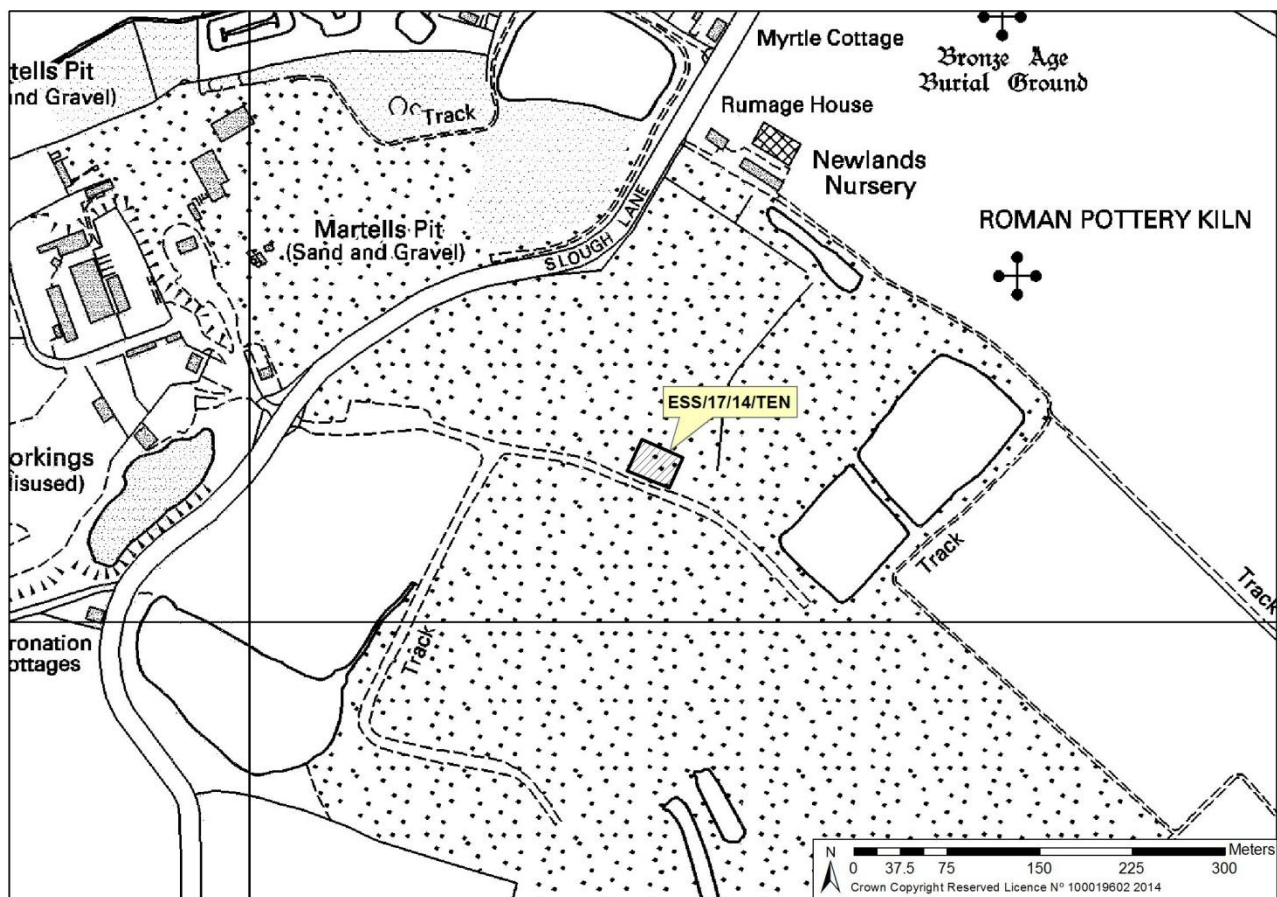
Ref: **ESS/17/14/TEN**

Applicant: **Renewable Power Systems**

Report by Director of Operations, Environment and Economy

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The full application can be viewed at www.essex.gov.uk/viewplanning



1. BACKGROUND

The Ardleigh gravel deposit at Martell's Quarry has been continuously worked since the 1920's with several planning permissions been granted to extend operations. The quarry was taken over by a national aggregate company in 2007 that subsequently released the landfilling rights to a separate company.

In 1996, planning permission ESS/56/96/TEN was granted for mineral extraction from 10.3 hectares of land at Park Farm which lies to the north and east of the current application site. Restoration is to be achieved through the landfilling of commercial and industrial wastes to existing ground levels and agricultural after use. It should be noted that extraction of mineral has since ceased with only infilling having taken place with two voids remaining to be restored.

2. SITE

Martell's Quarry lies approximately 6.5km to the north-east of Colchester and 1.5km south of Ardleigh village 1.5km west of Burnt Heath village. The A120(T) trunk road is located approximately 700m to the south and connects to the A12(T) which links London and Ipswich at the Crown Interchange, just to the north of Colchester. Frating Road, part of the main road between Ardleigh and Burnt Heath lies 1km to the north-east and Bromley Road, which links Burnt Heath to Colchester, lies 500m to the south. Slough Lane, which runs north to south bisecting the quarry, with the current plant site on the west side adjoining the Martell's Industrial Estate and the most recent workings on the east side.

There are four Local Wildlife Sites (County Wildlife Sites) within 2km of the development site and there is the Ardleigh Gravel Pit geological Site of Special Scientific Interest (SSSI), within the quarry but would be unaffected by the proposal.

The proposal would be located within the quarry along the northern boundary of the site. Agricultural land adjoins the site to the north and the existing landfill to the south. The nearest residential property to the proposal site is 250 metres to the north which is screened by existing hedging along the northern boundary.

3. PROPOSAL

The applicant is seeking planning permission for the installation of a 1000 kWe environmental flare compound. It is anticipated that the compound would produce approximately 650kW of electricity for a period of ten years within a decline in production thereafter. The electricity would be exported to the local network via a buried cable.

The compound would include a gas plant, generator, storage tanks, transformer, switch and meter room and associated close boarded and palisade fencing. The maximum height of the facility excluding the generator exhaust and flare stack would be 4 metres. The generator and flare stack would be 6 metres and 8 metres respectively.

A 3.5 metre high close-boarded fence would be located along the northern boundary of the site with additional landscaping to assist in screening the proposal.

4. POLICIES

The following policies of the Essex & Southend Waste Local Plan 2001 (WLP) and Tendring District Local Plan adopted in 2007 (TLP) provide the development framework for this application. The following policies are of relevance to this application:

<u>Policy</u>	<u>WLP</u>	<u>TLP</u>
Landfill Gas	W7H	
Development Control Criteria	W10E	
Noise Pollution		COM22
Landscape Character		EN1

The National Planning Policy Framework (Framework) was published on 27 March 2012 and sets out the Government's planning policies for England and how these are expected to be applied. The Framework highlights that the purpose of the planning system is to contribute to the achievement of sustainable development. It goes on to state that there are three dimensions to sustainable development: economic, social and environmental. The Framework places a presumption in favour of sustainable development. However, Paragraph 11 states that planning law requires that applications for planning permission must be determined in accordance with the development plan unless material considerations indicate otherwise.

For decision-taking the Framework states that this means approving development proposals that accord with the development plan without delay; and where the development plan is absent, silent or relevant policies are out-of-date, granting permission unless any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole; or specific policies in this Framework indicate development should be restricted.

In respect of the above, Paragraph 215 of the Framework, which it is considered is applicable to the WLP and TLP, states that due weight should be given to relevant policies in existing plans according to their degree of consistency with this Framework (the closer the policies in the plan to the policies in the Framework, the greater the weight that may be given).

With regard to updates/replacements or additions to the above, the Waste Development Document: Preferred Approach 2011 (now known as the Replacement Waste Local Plan (RWLP)) should be given little weight having not been 'published' for the purposes of the Framework. The Framework states (Annex 1):

From the day of publication, decision-takers may also give weight to relevant policies in emerging plans according to:

- The stage of preparation of the emerging plan (the more advanced the preparation, the greater the weight that may be given);
- The extent to which there are unresolved objections to relevant policies (the less significant the unresolved objections, the greater the weight that may be given), and;
- The degree of consistency of the relevant policies in the emerging plan to the policies in this Framework (the closer the policies in the emerging plan to the policies in the Framework, the greater the weight that may be given).

The RWLP has yet to reach 'submission stage' and as such it is too early in the development of the RWLP for it to hold any significant weight in decision making.

As a note to the above, the Framework does not contain specific waste policies, as the National Waste Management Plan for England (NWMP) is the overarching National Plan for Waste Management. Therefore, until Waste Planning Policy Statement (PPS 10) is updated in accordance with the advice contained within the NWMP, PPS10 remains the most up-to-date source of Government guidance for determining waste applications and as such reference to this Statement, in addition to the Framework, will also be provided, as relevant in the body of this report/appraisal.

Tendring District Council (TDC) is in the process of creating a new Tendring District Council Local Plan (TLPSD) and this was placed on public consultation from November 2012 to January 2013. Objections to the Plan raised as a part of this were considered and appraised and a series of changes, which were approved by Members in November 2013, were subsequently made to the Plan. These changes were subject to a public consultation between January and February 2014 and the intention is that the TLPSD will now be submitted to the Secretary of State for examination in early 2014. The following policies are considered of relevance:

<u>Policy</u>	<u>TLPSD</u>
The Countryside Landscape	PLA5

In consideration of the stages of production and adoption of the RMLP and TLPSD it is considered that more weight can be applied to the RMLP than the TLPSD.

5. CONSULTATIONS

TENDRING DISTRICT COUNCIL – Objects on lack of information concerning background noise levels, inadequate noise report and potential impact to residents through noise.

ENVIRONMENT AGENCY – No objection.

ENGLISH HERITAGE – Application should be determined in accordance with national and local policy guidance, and on the basis of your specialist conservation advice.

HIGHWAY AUTHORITY – No objection.

COUNTY COUNCIL'S NOISE AND AIR QUALITY CONSULTANT – No objection subject to a condition requiring updated noise assessment based on background noise levels.

PLACE SERVICES (Landscape and Historic Environment) ENVIRONMENT, SUSTAINABILITY AND HIGHWAYS – No objection subject to a condition requiring submission of a planting plan.

ARDLEIGH PARISH COUNCIL – Any comments received will be reported.

LOCAL MEMBER – TENDRING – Tendring Rural West – Any comments received will be reported.

6. REPRESENTATIONS

1 property was directly notified of the application. No letters of representation have been received.

7. APPRAISAL

The key issues for consideration are:

- A. Need and Principle of Development, and;
- B. Impact upon Amenity.

A NEED AND PRINCIPLE OF DEVELOPMENT

The Framework states that there are three strands of sustainability. Sustainable development focuses on building a strong competitive economy, whilst enhancing the local environment and supporting strong, vibrant and healthy communities. The Framework considers these three roles to be mutually dependant states significant weight should be given to proposals, which support economic growth and the prevention of climate change.

As noted earlier the within the report, the Framework does not contain specific waste policies, which means that PSS10 and the National Waste Management Plan for England are material considerations in decision making. However, local authorities taking decisions on waste applications should have regard to policies in the Framework so far as relevant.

PPS10 states that 'the overall objective of Government policy on waste, as set out in the strategy for sustainable development, is to protect human health and the environment by producing less waste and by using it as a resource wherever possible. With sustainable waste management, the Government aims to break the link between economic growth and the environmental impact of waste, by moving the management of waste up the 'waste hierarchy' of prevention, preparing for reuse, recycling, other recovery, and disposing only as a last resort

Landfill gas is the natural product of the complex process of the degradation of

organic material in the absence of oxygen. The process comprises a complex chain of reactions. Initially the oxygen within the waste is used up in an aerobic degradation phase. This is similar to the process which takes place in a compost heap. The heat generated during this phase and the new, oxygen-free environment provide the ideal conditions for different sets of bacteria to take over. These include the set known as methanogens. In addition, other constituents of the waste, including certain trace minerals, provide nutrients to the bacteria and ensure that a healthy population is maintained. The bacteria convert the carbon and water within the waste into a gas comprising methane (CH₄) and carbon dioxide (CO₂).

The applicant has stated in support of their application that modern, engineered landfill sites, such as Martells, provide ideal conditions for the methanogenic degradation of waste and the production of a useful energy source – landfill gas. The collection and utilisation of landfill gas for the generation of electricity is an increasingly popular and viable form of recycling.

As noted above the proposal would be used in conjunction with the already permitted landfill. An active gas collection system comprising vertical wells is to be installed within the landfill area to extract the landfill gas. These vertical wells are required by the Environmental Permit for the site and are covered by the planning permission for the landfill site.

The generating station would be operational for a period of up to twenty years. The Environmental Permit covering the site requires gas control on the site until the site ceases production of landfill gas. Landfill gas can be produced for many years after the site closes therefore, active gas extraction would be required over this time with or without the generation project.

WLP policy W7H states that 'Subject to the criteria and policies contained in the development plan, in particular the considerations set out in policy W10E, landfill gas utilisation plants for energy recovery will be encouraged at landfill sites, and this will be a material consideration in assessing the acceptability of landfill proposals'.

The applicant has stated that the gas flare would be expected to produce 650 kW of electricity for a period of ten years and thereafter at declining rate. At these outputs up to 65,000,000 units (kWh) of electricity could be produced for export to the local grid. Every tonne of waste deposited on site can produce over 340 kWh of electricity. This is sufficient to power an electric light bulb for 5,000 hours; alternatively it is enough electricity to supply the average household for four weeks. The scheme could supply enough electricity to meet the demands of over 1,000 households.

It is considered that the need and principle for the proposed development exists given the Martells Quarry history, the context of the surrounding area being a landfill operation in compliance with Policies W7H of the WLP. It is acknowledged that a residential uses is located 250 metres away to the north of the site therefore, the environmental role of the proposal will be considered further in the report.

B IMPACT UPON AMENITY

The Framework seeks to always secure a high standard of amenity for all existing and future occupants of land and buildings.

WLP Policy W10E (Development Management Criteria) states inter alia that waste management development, including landfill, will be permitted where satisfactory provision is made in respect of the effect of the development on the amenity of neighbouring occupiers, particularly from noise, smell, dust and other potential pollutants and impact upon the landscape.

TLP Policy EN1 - Landscape Character states inter alia;

The quality of the district's landscape and its distinctive local character will be protected and, where possible, enhanced. Any development which would significantly harm landscape character or quality will not be permitted.

Development control will seek in particular to conserve the following natural and man-made features which contribute to local distinctiveness:

- a. estuaries and rivers, and the undeveloped coast;
- b. skylines and prominent views, including those of ridge tops and plateau edges;
- c. the settings and character of settlements and of attractive and/or vernacular buildings within the landscape;
- d. historic landscapes and listed parks and gardens, ancient woodlands, and other important woodland, hedgerows and trees;
- e. native species of landscape planting and local building materials; and
- f. the traditional character of protected lanes, other rural lanes, bridleways and footpaths. Where a local landscape is capable of accommodating development, any proposals shall include suitable measures for landscape conservation and enhancement.

An objection has been raised by Tendring District Council (TDC) that the proposal would have a negative impact upon the amenity of residents through, in summary, noise as the existing background noise levels have not been assessed. The following section seeks to assess this potential impact as part of the Framework's environmental role of sustainable development.

TDLP Policy COM22 (Noise Pollution) states 'Planning permission will not be granted for noise sensitive developments such as hospitals, schools and housing unless one of the following conditions is met:

- i. the development is located away from existing sources of noise; or
- ii. mitigation measures are proposed which will adequately mitigate the adverse effects of noise at all times and in all circumstances.

Noisy developments should be located away from sensitive developments unless adequate provision has been made to mitigate the adverse effects of noise likely to be generated or experienced by others'.

With regard to noise, dust and odour, the applicant holds an Environmental Permit which requires these aspects to be strictly controlled through the permitting

regime. In addition, the applicant has highlighted that acoustically insulated containers would house the spark ignition gas engines and alternator sets with all of the necessary controls and instrumentation. The generator would be monitored continually by on board computers. The latter would feed information via a dedicated telephone link to a twenty-four hour central monitoring station. The site would be “unmanned” with control and monitoring carried out remotely by means of telemetry links. Trained technicians and engineers would visit the site at least once per week and typically two or three times a week to carry out routine monitoring and servicing. Planned maintenance may require greater attendance for short periods.

The flare would burn the landfill gas at a minimum of 1000 °C with a minimum residence time of 0.3 seconds. The flame would be completely enclosed within the flare and no flame would be visible. The applicant has confirmed the proposed generators and flare would meet the latest Environment Agency guidance for emissions.

In responding to the comments raised by TDC the applicant stated that although the exact make and model of the generators is not yet tendered the specification would be set out to match that submitted in the planning – ie that it must meet 60 dB(A) at 10 metres and have no tonal characteristic. The noise level of the generators would be checked as part of the commissioning process and continued onsite monitoring. The -5 dB screening is given by the partial screening afforded by the acoustic fence on the northern side of the proposed compound. The screen would provide partial screening for the generator as a whole (since it would fully screen the radiators and generator container but not the exhaust outlet).

The County’s noise consultant has raised no objection to the proposal on noise or air quality grounds. The noise consultant also stated, in summary, that the 5 dB correction applied to the exhaust stacks is not confirmed. Nevertheless, it is a reasonable assumption that the required noise levels at nearby residential premises could be achieved. However, it is recommended that a condition is imposed to ensure this is demonstrated, prior to work starting on site, through submission of a revised noise assessment being undertaken based on noise data for the actual gas plant to be used and to demonstrate that the noise predictions previously determined can be achieved.

Furthermore, the Environment Agency, County Landscape and Historic Building advisors have raised no objection to the scheme. Therefore, in consideration of the above, the consultation responses received, the existing land use being an active landfill it is considered that sufficient information has been produced to demonstrate that the development would not have an undue impact upon the local amenity through noise, dust or odour. Accordingly, it is deemed that the proposal complies with WLP policy W10E and TDLP Policies COM22 and EN1.

8. CONCLUSION

In conclusion, the need of the proposal has been demonstrated given that it would manage landfill gas which if left untreated would have a negative environmental

impact in compliance with the objectives of PPS10 and WLP policy W10E. Furthermore, the principle of the development being located within the Martells Quarry landfill area has been demonstrated through the site's history, the context of the surrounding area which is in compliance with WLP policy W7H.

There would be minimal impact on the landscape and visual amenity and noise could be controlled through the imposition of a condition in the event that permission is granted. The presence of the flare would act to improve amenity in terms of controlling odour, thereby complying with Waste Local Plan Policy W10E.

The economic, social and environmental strands of the Framework are considered to have been achieved equally and the gas flare would be considered to constitute 'sustainable development' in accordance with the Framework.

Furthermore, the WLP and TDLP policies relied upon in this report are considered to be consistent with the Framework and therefore the proposal is considered acceptable subject to the imposition of appropriate conditions.

9. RECOMMENDED

That planning permission be **granted** subject to conditions covering the following matters:

1. COM1 – Commencement
2. COM3 – Compliance with Submitted Details
3. Bespoke – updating of submitted Noise Assessment
4. NSE3 – Monitoring Noise Levels
5. LAND1 – Landscape Scheme

BACKGROUND PAPERS

Consultation replies

Application Details contained within ESS/17/14/TEN.

THE CONSERVATION OF HABITATS AND SPECIES REGULATIONS 2010

The proposed development would not be located adjacent to a European site.

Therefore, it is considered that an Appropriate Assessment under Regulation 61 of The Conservation of Habitats and Species Regulations 2010 is not required.

EQUALITIES IMPACT ASSESSMENT: This report only concerns the determination of an application for planning permission. It does however take into account any equality implications. The recommendation has been made after consideration of the application and supporting documents, the development plan, government policy and guidance, representations and all other material planning considerations as detailed in the body of the report.

STATEMENT OF HOW THE LOCAL AUTHORITY HAS WORKED WITH THE

APPLICANT IN A POSITIVE AND PROACTIVE MANNER

The Local Planning Authority has acted positively and proactively in determining this application by assessing the proposal against all material considerations, including planning policies and any representations that may have been received and subsequently determining to grant planning permission in accordance with the presumption in favour of sustainable development, as set out within the National Planning Policy Framework.

LOCAL MEMBER NOTIFICATION

TENDRING – Tendring Rural West