

ITEM NO: 5

WARD NO: Rhyl South East

APPLICATION NO: 45/2012/0383/ PFRE

PROPOSAL: Installation of self-contained biomass heating system with external silo facility for heating the the leisure centre and swimming pool

LOCATION: Rhyl High School And Leisure Centre 86 Grange Road Rhyl

APPLICANT: E.ON Energy Solutions Ltd.

CONSTRAINTS: C1 Flood Zone

PUBLICITY UNDERTAKEN: Site Notice - No
Press Notice - No
Neighbour letters - Yes

REASON(S) APPLICATION REPORTED TO COMMITTEE:
Scheme of Delegation Part 2

- Application on land in the Council's ownership where the proposal does not relate to a specific function exercised by the Council

CONSULTATION RESPONSES:

RHYL TOWN COUNCIL

Defer to enable further information to be sought in respect of the likelihood of odours emanating from the biomass system and the impact on the school, Leisure Centre and neighbouring residential properties”.

DENBIGHSHIRE COUNTY COUNCIL CONSULTEES

TECHNICAL OFFICER (POLLUTION CONTROL)

Objected to a flue height of 10.9m as originally proposed and requested additional information on the indicative emission dispersal rates in accordance with the provisions of the Clean Air Act and the Council's Local Air Quality Management duties.

Following receipt of revised elevations and emissions data, are now satisfied that the stack (flue) height of the boiler should be adequate to ensure correct plume dispersion.

RESPONSE TO PUBLICITY:

No public responses received.

EXPIRY DATE OF APPLICATION: 03/07/2012

PLANNING ASSESSMENT:

1. THE PROPOSAL:

1.1 Summary of proposals

- 1.1.1 The proposal is for a containerised 600kW biomass unit, with flue, storage silo and new hardstanding and fencing. The proposed biomass feedstock will be bulk brown wood pellets. The plans at the front of the report show the basic details of the scheme.

- 1.1.2 Biomass is classed as a carbon neutral fuel and the objective of the proposal is to provide low carbon heat and hot water to the leisure centre and swimming pool.
- 1.1.3 The planning application is supported by a Design and Access Statement (DAS), the Manufacturers Brochure and photographs of the components of the system.
- 1.1.4 The DAS states that a containerised unit has been proposed as it enables a biomass heating system to be installed with minimum disruption to the existing building and surrounding area and refers to it as a 'plug in and play' system. The information with the application indicates:
- The proposed 600kW Hoval STU wood pellet boiler will be housed in a Dove Grey container and will measure 10.1m in length and 3.5m in height. It will be installed on the north facing elevation of the leisure centre on the external wall of the existing boiler room.
 - The steel coloured wood pellet storage silo will be adjacent to the container and will measure 4 meters in width and is 8.7m in height. Fences will be erected around the storage silo to restrict access; fences will be brown in colour.
 - The proposed flue is 13.5 metre tall and would extend 2m above the highest part of the building to ensure air quality standards can be achieved.
 - The container and the storage silo will be erected on a concrete plinth specially designed by a structural engineer to take into account the point loads of the container, the silo and the flue.
 - Vehicular deliveries of wood pellets will be required at varying intervals throughout the year and the wood pellets will be blown into and the storage silo.
 - Delivery vehicles will use the existing leisure centre site access from Grange Road and use the existing gated side access to the side of the existing boiler room of the leisure centre for wood pellet drops.
 - A small section of new hard standing will be required along the access route along the southern elevation of the existing boiler house (approximately 15m in length); this will be constructed using a lightweight permeable ground reinforcement system for grass or gravel stabilisation rather than concrete.
 - A full delivery schedule has yet to be agreed, however deliveries are likely to occur as follows:
 - Running at full peak load over winter months – delivery approx. every 10 days
 - On demand during the summer months – delivery approx. once a month.
 - Ash will be collected at similar intervals.
 - The preferred fuel supplier is Billington Biofuels; North Wales customers are supplied from the Stafford distribution depot.

1.2 Description of site and surroundings

- 1.2.1 The site is within Rhyl development boundary and within the curtilage of Rhyl High School and Leisure Centre. The leisure centre is surrounded by

residential properties with playing fields and public open space to the north and to the east of the main buildings.

- 1.2.2 The containerised biomass system would be located on the northern elevation to the rear of the leisure centre building where the existing boiler room and associated flues are located. The rear of the Leisure Centre building backs onto existing public open space.
- 1.2.3 There is a public footpath approximately 20m to the east of the application site and the nearest residential curtilage is approximately 70m to the north (rear gardens of Bridgegate Road which back onto the playing fields to the rear of the Leisure Centre).
- 1.2.4 The container will not be blocking or taking away any car parking provision or pedestrian right of way. Existing pedestrian access will remain.

1.3 Relevant planning constraints/considerations

- 1.3.1 The site is un-annotated land within the development boundary in the Denbighshire Unitary Development Plan.
- 1.3.2 The Leisure Centre site lies within a Zone C1 flood risk zone and Groundwater vulnerability zone.

1.4 Relevant planning history

1.4.1 Various applications on the site over the years, none of direct relevance to this proposal.

1.5 Developments/changes since the original submission

- 1.5.1 The flue height has been increased from 10.9m to 13.5m.

1.6 Other relevant background information

- 1.6.1 The scheme is a pilot project for the Council and is part of an initiative to reduce the carbon emissions and energy costs associated with Council run buildings. E.ON Energy Solutions have been appointed as an Energy Services Company (ESCo) who will own and operate the biomass system and supply heat and hot water to the Leisure Centre under contract.
- 1.6.2 Biomass systems are eligible for the Renewable Heat Incentive, which is a government backed financial incentive designed to encourage renewable heat generation.

2. **DETAILS OF PLANNING HISTORY:**

2.1 Planning history for the Rhyl Leisure Centre (none of direct relevance to the proposal):

- 2/RYL/305A/82 – siting of 4 single mobile classrooms (granted 27/10/82)
- 2/RYL/344/83 – Building for town squash courts, spectator viewing, changing rooms (granted 08/11/83)
- 2/RYL/0358/93 – Satellite dish (approved 09/11/93)
- 45/2003/0642 – Alternations and extensions to sports centre to form new entrance and store room, boundary fencing and upgrading of lighting scheme to reduced size all weather pitch. Construction of all-weather running track with fencing and lighting (granted 23/07/03)
- 45/2004/0204 - Alternations and extensions to Rhyl Leisure Centre to provide new reception, link corridor and changing rooms (amendment to 45/2003/0642) (granted 12/05/04)

3. **RELEVANT POLICIES AND GUIDANCE:**

The main planning policies and guidance are considered to be:

- 3.1 DENBIGHSHIRE UNITARY DEVELOPMENT PLAN (adopted 3rd July 2002)
Policy STRAT 2 - Energy

Policy GEN 1 – Development Within Development Boundaries
Policy GEN 2 – Development of Un-Annotated Land
Policy GEN 6 – Development Control Requirements
Policy ENP 1 – Pollution
Policy EN6 6 - Flooding
Policy MEW 8 – Renewable Energy

3.2 GOVERNMENT GUIDANCE

Planning Policy Wales
Technical Advice Note 8 – Renewable Energy (TAN8)
Technical Advice Note 15 – Development and Flood Risk (TAN15)

WELSH GOVERNMENT PRACTICE GUIDANCE

Planning Implications of Renewable and Low Carbon Energy (Practice Guidance 2011)

4. MAIN PLANNING CONSIDERATIONS:

4.1 The main land use planning issues are considered to be:

- 4.1.1 Principle
- 4.1.2 Air Quality
- 4.1.3 Traffic and Transport
- 4.1.4 Visual Impact
- 4.1.5 Public amenity and safety
- 4.1.6 Flooding

4.2 In relation to the main planning considerations:

4.2.1 Principle

The UK is subject to the requirements of the EU Renewable Energy Directive. These include a UK target of 15% of energy derived from renewables by 2020. In planning policy terms, renewable energy is the term used to cover those sources of energy, other than fossil fuels or nuclear, which are continuously and sustainably available; this definition includes biomass energy. Biomass is classed as renewable as the carbon dioxide emissions that are released when the fuel is burned is absorbed during its growth and therefore the overall carbon dioxide emissions per unit of energy generated are much lower from biomass when compared with fossil fuels.

The Welsh Government Technical Guidance categorises a 600kW biomass system as a 'medium scale' installation which is typically associated with community facilities, schools or industrial units.

Planning Policy Wales states that local planning authorities should facilitate the development of all forms of renewable and low carbon energy to move towards a low carbon economy, subject to due consideration of local impacts.

In accordance with UDP planning policy STRAT 2 and MEW 8, applications for renewable energy technologies should be supported in principle where there is no unacceptable effect to the environmental quality of the locality.

4.2.2 Air Quality

UDP policy ENP 1 seeks to protect the environment and / or the amenity of nearby properties in terms of ii) emissions of airborne pollutants. The key impacts on air quality that may arise from a biomass system include:

- Stack (flue) emissions – e.g. nitrogen and sulphurous oxides, carbon dioxide emissions
- Particulate emissions
- Emissions from construction and operation vehicles – e.g. dust generation during unloading.

In addition, for new heating appliances which burn solid fuel at a rate of 45.5kg/hour or more, it is necessary for the chimney / flue height to be approved by the Local Authority under the provisions of the Clean Air Act 1993. Local Authorities also have a duty under the Environment Act 1995 to review and assess air quality in their area which forms part of the system of Local Air Quality Management (LAQM); new combustion appliances with a rated capacity of between 50kW and 20MW need to be subject to an air quality assessment.

This proposal has triggered both of these legislative requirements and therefore the Council's Public Protection Department were consulted on the application. The Pollution Control Technical Officer initially objected to the proposed flue height of 10.9m as insufficient information had been provided to demonstrate that correct plume dispersion could be achieved. However the flue height has been increased and revised elevations plans have been submitted which now show a flue height of 13.5m. Emissions data was also submitted by the applicant which demonstrates that the maximum stack (flue) emissions rates for Particulates and Nitrogen Oxides for a 13m flue would be below the target rate, and therefore the Council's Pollution Control Technical Officer is satisfied that a flue height of 13.5m should be adequate to ensure correct plume dispersion. The proposed feedstock is wood pellet, which is a compact processed fuel and will be blown from the delivery vehicle directly into the storage silo; dust is therefore unlikely to be problematic. With respect to the Town Council's concerns, Officers feel air quality issues have now been adequately assessed and feel there would be no benefit in deferring the application.

In Officers opinion, air quality issues have therefore been adequately addressed and there would be no conflict with UDP policy ENP 1.

4.2.3 Noise

UDP policy GEN 6 v) seeks to ensure new development does not unacceptably affect the amenity of local residents, including unacceptable noise impacts.

As with other combustion appliances, noise can be generated by the operation of a biomass system, however the proposed boiler equipment will be housed in a sealed container and the system will be installed adjacent to the existing boiler house, which already generates an acceptable level of noise. The Pollution Control Technical Officer has no concerns in relation to noise issues and the nearest noise sensitive receptors are the residential properties to the rear of the Leisure Centre which are over 70m from the application site.

In Officers opinion, it is unlikely that any unacceptable noise will be generated by this proposal hence there would be no conflict with GEN 6 v).

4.2.4 Traffic and Transport

UDP policy GEN 6 vi) and vii) seeks to ensure new development proposals do not restrict access or have a negative effect on the highways network.

Vehicular deliveries of wood pellets to serve the proposal will be required at varying intervals throughout the year and ash collection will be at similar intervals to fuel deliveries. Therefore, the maximum number of vehicles associated with the operation of the biomass system will be approximately 2 vehicles every month in the summer rising to a 2 vehicles every 10 days in the winter. No alteration to the public highway is required to serve this development proposal and the existing leisure centre site access will be used to access the application site. Once on site, the delivery point is to the rear of the Leisure Centre building which is set away from the main car park area.

In Officers opinion, the proposal will not take away or block any car park provision or public right of way and there would be no unacceptable traffic or transport impacts as a result of this proposal, therefore no conflict with UDP policy GEN 6 vi) and vii).

4.2.5 Impact on visual amenity

UDP policy GEN 6 i) seeks to ensure new development respects the site and surroundings in terms of siting, layout etc.

The application site is to the rear of the Leisure Centre building on the northern elevation where the existing boiler room and flues are located. The container, storage silo and flue will be visible from the open space to the rear of the leisure centre and from the rear of properties along Bridgegate Road. The top of the storage silo will be visible from the car park area to the front of the Leisure Centre and the flue will protrude approx. 2m above the highest part of the Leisure Centre roof. A smaller flue was initially proposed by this would not have complied with the local air quality management assessment. A fence will be erected around the bottom of the storage silo to reduce the visual impact as well as acting as a security measure, and the boiler equipment will be concealed within the container.

Given the footprint of the leisure centre and the presence of an existing flue on the building, Officers conclusion is that the proposed biomass system will be clearly subsidiary to the main complex and will have a limited visual impact. It therefore would not conflict with policy GEN 6 i).

4.2.6 Public amenity and safety

UDP policy GEN 6 xi) seeks to ensure public and community safety is taken into account when development proposals are assessed.

The proposed biomass system will not affect public access to the leisure centre complex or reduce the area of public open space. The boiler equipment will be contained within a sealed container and the storage silo will be fenced off to restrict public access and the site will be secure.

In Officers opinion, adequate measures to protect public safety have been incorporated into the proposal and therefore no conflict with policy GEN 6 xi).

4.2.7 Flooding

UDP policy ENP 6 seeks to ensure development does not result in an unacceptable risk from flooding. The site lies within a C1 Flood Risk zone which is defined in TAN15 as an area of the floodplain which are developed and served by significant infrastructure, including flood defences.

The proposal has a very small footprint (50 square metres) and the only new impermeable hardstanding will be the concrete plinth underneath the container and storage silo. The new hardstanding area on the southern elevation of the boiler house to enable delivery vehicles to access the site will be a lightweight permeable ground reinforcement system rather than concrete.

Given the scale of the development, Officers are of the opinion that the proposal will not give rise to an increased flood risk on site and therefore there is no conflict with policy ENP 6.

5. SUMMARY AND CONCLUSIONS:

- 5.1 The proposal is considered to comply with national and local policy, and having regard to potential local impacts, it is not anticipated there would be any unacceptable effects on the locality.

RECOMMENDATION: GRANT - subject to the following conditions:-

1. The development hereby permitted shall be begun before the expiration of five years from the date of this permission.
2. This permission relates solely to the installation of a contained 600kW biomass boiler, wood pellet storage silo, flue and ancillary works as described in the application plans. Written confirmation of the date of the first generation of heat and hot water from the development shall be provided to the Local Planning Authority no later than 1 calendar month after the event.
3. The height of the flue shall be no less than 13 metres and no greater than 13.5 metres. Any deviation in flue height shall require the written approval of the Local Planning Authority.
4. **PRE-COMMENCEMENT CONDITION**
No development shall commence until details of the design, height and materials proposed for the fences shown on the elevation plan have been submitted to and approved in writing by the Local Planning Authority.

The reason(s) for the condition(s) is(are):-

1. To comply with the provisions of Section 91 of the Town and Country Planning Act 1990.
2. For the avoidance of doubt and for monitoring purposes.
3. In the interests of pollution control and visual amenity.
4. In the interests of visual amenity and public safety.

NOTES TO APPLICANT:

Any deviation in flue height shall require approval from the Local Authority under the provisions of the Clean Air Act 1993. Sufficient data will need to be provided to enable the Council to undertake the chimney height calculation.