



Bwrdd Iechyd Prifysgol
Abertawe Bro Morgannwg
University Health Board

ABM Headquarters
One Talbot Gateway,
Seaway Parade, Port Talbot
SA12 7BR

Tel: 01639 683362
Email: Sandra.husbands@wales.nhs.uk

Saul White
Natural Resources Wales
Cambria House
29 Newport Road
Cardiff
CF24 0TP

Environmental Permitting (England and Wales) Regulations 2010
Application for an EP; Drax Power Limited, (PAN-002743) at Abergelli Farm, Abergelli, Swansea, SA5 7NN

We welcome the opportunity to comment on this permit application. We have consulted with our colleagues at the Environmental Public Health Service (delivered collaboratively through Public Health Wales' Health Protection Team and Public Health England's Centre for Radiation, Chemical and Environmental Hazards Wales

This assessment is based on actual or potential health risks from environmental exposures to chemicals, noise from the proposed operations including emergencies and extreme environmental events such as flooding. We do not make comment on impact of electro-magnetic fields (EMF) as in this case the issue is being considered by specialists within Public Health England as part of the Nationally Significant Infrastructure Project (NSIP) planning process.

Any recommendations are for consideration by the Regulator and will be reflected in any permit conditions made (see rationale below).

Proposed Operations

The installation will incorporate a single open cycle gas turbine and will have a net thermal input of 748MW burning natural gas. Fuel will be burnt in the combustion chamber from where hot gases expand through the gas turbine driving an electrical generator producing up to 299MW electrical output. The plant and process have been designed as a peaking power station for the supply of electricity to the National Electricity Transmission System for up to 2,250 hours per year (1,500 hours per year as a five year rolling average) at times of high demand or during periods of instability in the grid.

Natural gas will be brought to the site by a pipeline linking to the gas National Transmission System approximately 1.0km from the Power Station. Natural gas will not be stored on site.

Products of combustion, including oxides of nitrogen, will be discharged through a 35m stack. The only release to water will be site surface water drainage which will be passed through an oil interceptor prior to

discharge. Other process releases, including effluent from cleaning of turbine blades and spent lubricants which will be removed for off-site disposal.

The proposal is to be located in a predominantly rural area north of Swansea. The closest sensitive receptors are properties at 480m distance

Overall Conclusion

We have no grounds for objection based upon the public health considerations contained within the application subject. Emission to atmosphere must be via the proposed stack with a height of no less than 35m. Noise emissions must be based on representative sensitive receptors and background noise levels as agreed with the local authority.

Public Health Risk Assessment

This permit application and the overall NSIP have been accompanied by an Environmental Impact Assessment (EIA). Potential impacts upon health have been identified and assessed, including construction phase impacts. The key emissions of interest are to air and of noise. There are no significant emissions to land or water.

Air quality impacts arising from the operational phase have been calculated. The maximum Predicted Environmental Concentrations (a combination of existing levels and process contribution) based on a minimum stack height of 35m are well within relevant air quality objectives for the protection of human health.

Noise emissions are to be based on representative sensitive receptors and background noise levels as agreed with the local authority.

Any additional information obtained by the Regulator in relation to these comments should be sent to us for consideration. Such information could affect the comments made in this response.

Yours sincerely,



Dr Sandra Husbands

Executive Director of Public Health