

MIDDLE LEVEL COMMISSIONERS



**MIDDLE LEVEL OFFICES
85 WHITTLESEY ROAD
MARCH, CAMBS. PE15 0AH**

Telephone: [REDACTED]
Email: engineers@middlelevel.gov.uk
enquiries@middlelevel.gov.uk
planningmatters@middlelevel.gov.uk

Website: www.middlelevel.gov.uk

Clerk, Chief Engineer & Chief Executive
David C Thomas B.Eng, M.C.M.I.

Your Ref :

Our Ref : GM/332/PL/116
(Please quote this reference on any correspondence)

15 November 2022

Waldersey Internal Drainage Board

Relevant Representations for Medworth Energy from Waste Combined Heat and Power Facility Development Consent Order at Algores Way, Wisbech - Medworth CHP Limited (MCL)

Further to MVV's e-mail dated 30th June attaching a letter of the same date the relevant documents have been reviewed and the Board comments as follows:

A. General Comment

1. Risk Management Authorities (RMA)

- a. The Middle Level Commissioners (the Commissioners) are a statutory authority responsible for navigation, environmental, water level and flood risk management in respect of major watercourses and water control structures within their catchment.
- b. In addition to their statutory role, the Commissioners provide a consultancy service to the Internal Drainage Boards (the Boards) within and adjacent to their area. The Boards are autonomous water level and flood risk management authorities that supervises drainage at a more local level obtaining support from the Commissioners' staff when required.
- c. The Commissioners and associated Boards are Risk Management Authorities (RMA), as identified by Defra and are guided by the Flood and Coastal Erosion Risk Management (FCERM) Strategy. The provision of FCERM was a requirement of the Flood & Water Management Act (F&WMA) 2010 with the latest version being issued in July 2020.

The Strategy describes what needs to be undertaken by all RMA involved in flood and coastal erosion management including IDB's "for the benefit of people and places" and provides a framework for guiding the operational activities and decision making of practitioners supporting the direction set by government policy which includes the FCERM policy statement.

- d. Together with Cambridgeshire County Council, Peterborough City Council, the District Councils and other stakeholders, the Commissioners and associated Boards are members of the Cambridgeshire & Peterborough Flood and Water (FLoW) Partnership. As members of this partnership the Commissioners and associated Boards generally promote issues improved water level management and reduce flood risk on our particular systems in accordance with the respective policy statement.

As members of the partnership, there has been some discussion with the County Council, in its role as the Lead Local Flood Authority (LLFA), concerning surface water disposal related issues associated with the proposal.

- e. Through the Commissioners the Board is also represented on many groups, partnerships and other Forums including the Environment Agency's Future Fens for Flood Risk Management (FRM), Anglian Waters Future Fens: The Integrated Adaptation Project, the Fenland Developers Forum etc.
- f. Members of the Commissioners staff have engaged in pre-application discussions with MVV and its agents to ensure that the final submission takes account of initial concerns around the information and methodologies required to be able to fully assess the proposals. It is pleasing to note that this advice has largely been followed. However, there are still some matters that need to be addressed to allow the Board to fully understand the impacts of the scheme and to determine whether any mitigation measures proposed are sufficient.

The Board requests engagement in respect of these matters to ensure that these are resolved ahead of any consents or approvals being given to the proposal.

- g. The Board reserves the right for it and its agents to undertake further engagement with the applicant and its agents in order to review the design, construction and completion of environmental, water level and flood risk management works, prior to certification that such works are acceptable and the provision of a reasonable maintenance period during which time the Board or its agents can require the applicant or its agents to resolve any defects in the completed works.

2. Local Water level and flood risk management

The Hundred of Wisbech IDB has an arrangement whereby surface water, some treated effluent from small private treatment plants and occasional groundwater discharges, during excavations, from its urban and arable catchment, flow by gravity into the adjacent Waldersey IDB system off Crooked Bank where it is then pumped into the Environment Agency's higher level River Nene. Under normal circumstances this utilises Waldersey IDB's South Brink Pumping Station.

Waldersey IDB predominantly serves an arable catchment but there is a large allocation for renewable energy site in the Emerging Fenland Local Plan.

Please note that both the Hundred of Wisbech IDB and Waldersey IDB are outside of the Middle Level Commissioners hydraulic catchment.

3. The Land Drainage Act and relevant RMA Byelaws

Please be advised that all the Boards primary powers are under the Land Drainage Act (LDA) 1991 and its Byelaws, policy statements and other relevant documentation, but sections of the Water Industry Act 1991, the Highways Act 1980 and the Flood & Water Management Act (F&WMA) are also relevant.

The Board also has nature conservation duties under the Land Drainage Act 1991, the Wildlife and Countryside Act 1981, the Protection of Badgers Act 1992, the Countryside and Rights of Way Act 2000, the Water Environment (Water Framework Directive) (England and Wales) Regulations 2003, the Eels (England and Wales) Regulations 2009, the Conservation of Habitats and Species Regulations 2010, the Flood and Water Management Act 2010, the Natural Environment and Rural Communities Act 2006, and as a competent authority under the Conservation (Natural Habitats etc) Regulations 1994.

The Board also has duties under the Environment Act 2021 to conserve and enhance biodiversity.

B. The Submission Documents

Environmental Statement Chapter 11: Biodiversity

In combination effects

It is stated that: *“Therefore, due to the precautionary approach taken to the screening process and identification of LSEs for the Proposed Development, in-combination effects will only need to be considered if it is found that the proposed development is likely to result in LSE on the European sites being considered and detailed within the HRA Report.”* This is not the Boards understanding. In-combination effects must be considered regardless of whether LSE has been established for the proposed development.

There are proposed plans to build a large potable water supply reservoir (Fens Reservoir) approximately 18 km to the south west of the proposed site. The in-combination effects of this development with the proposed reservoir will need to be considered.

Biodiversity Net Gain

In terms of Biodiversity Net Gain (BNG), if the watercourses through the site is over 5m then it must be assessed for BNG with the rivers & stream metric not using the linear ditches function of the terrestrial BNG metric. The Board shall be please if this could be confirmed.

Environmental Assessments

The environmental assessments reviewed to date (HRA & ES) do not consider the potential impacts, as set out in Appendix A of the Habitats Regulations Assessment of the Energy National Policy Statements Review, particularly with concern to downstream hydrological impacts on EPS: [Habitats Regulations Assessment of the Energy National Policy Statements Review \(publishing.service.gov.uk\)](https://publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/100000/habitats-regulations-assessment-of-the-energy-national-policy-statements-review.pdf)

Environmental Statement Chapter 12: Hydrology

Water Resources

Item 12.5.3 quite correctly advises that the site is within some of the driest areas in the country and the extreme hot weather events experienced during the summer and the on going drought situation have confirmed that the town is an area of serious water stress and this will increase as further impacts due to growth and climate change occurs.

Whilst it will no doubt be contended that the recent announcement for the Fens Reservoir reduces any local concern it will be several years before this is operational and it is still considered appropriate to alleviate this problem and in respect of responses to Strategic Policy documents the Commissioners and associated Boards have lobbied for several years that future growth must consider the whole water cycle process, giving serious consideration to reducing water usage and irreparable damage to the water sources including chalk streams and other watercourses enabling more water for other uses.

The impact of the volume of water detailed in the proposed abstraction application does not appear to have been assessed. The Nene catchment Abstraction Strategy suggests that there is a lack of consistency in the availability of water for abstraction from the catchment and restricted water available for any new abstraction therefore new abstraction applications may be restricted ([CAMS-Nene-Catchment-Abstraction-Management-Strategy.pdf \(publishing.service.gov.uk\)](https://publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/100000/cams-nene-catchment-abstraction-management-strategy.pdf)).

Therefore, the Commissioners and associated Boards promote water neutrality by minimising the use of potable water and encouraging the use of recycling and rainwater harvesting to enable the better use of a limited and decreasing resource.

Water Quality

Water quality and pollution control is generally a matter for the Environment Agency and the local Environmental Health Department; however, the Board is facing the increasing challenge of having to dispose of polluted and contaminated soil from its network due to the poor water quality as the result of pollution incidents within the area.

Whilst the proposed development will be subject to Environmental Permitting Regulations, which are outside of the Boards control, and it is appreciated that both water resources and quality are mainly matters for the Environment Agency (EA), the Board are concerned about the consequences, both physical and financial, of a pollution incident that effects some of the most fertile agricultural land in the area, the urban development, and aquatic environment either directly or indirectly and the implications that this could have on these.

Also, the quality of water discharge from the site, during all phases does not appear to have been considered. Given the ecological sensitivity of the hydraulically-linked EPS particularly to water levels and quality, the Board would expect the development to be able (or be required) to demonstrate 'water and nutrient neutrality' if it is to avoid an adverse impact upon the integrity of the sites, under the Habitats Regulations.

The Board is concerned about items of airborne waste, primarily plastic, card and paper, entering its system and collecting on weedscreen grills or entrances to culverts and increasing flood risk as is the increasing microplastics entering the aquatic environment.

Increased pollution caused by chemical spills during normal operating procedures or the likely significant effect of an emergency response, such as large volumes of water applied during firefighting and where that water may go.

The interception and containment of fire-fighting run-off will need to be of a significant volume. Fire-fighting operations which have become necessary after fire suppression systems have been unable to extinguish the fire may operate for a number of days, delivering 1000's of litres of water per minute. If the surface water run-off interception ponds are to be used to store such run-off, they will have to be off-line from the wider surface water drainage network in the area.

The Boards system is not subject to water abstraction requiring a licence or permit but the neighbouring Waldersey IDB district does include several abstractions for crop irrigation purposes.

In order to reduce any detrimental impacts resulting in the deterioration in the water quality during the lifetime of the proposed development including the construction, operational and decommissioning phases, the Board requests that appropriate systems are installed and implemented to ensure that no building and constructional materials, foreign debris or polluting matter is discharged or becomes deposited into an open watercourse by any means. This may require the installation of a suitable pollution retention device or devices to contain any foreign debris or polluting matter that enter the adjacent open watercourses.

In addition, the Board expects that adequate provision is made to retain any harmful pollutants or contaminated water on the site for disposal to a suitably permitted location and not allowed to discharge into the local aquatic network.

An IDB has a statutory duty to, whilst considering applications for consent to undertake any activity on an IDB drain, have regard for the objectives of the RBMP (Water framework directive) of the connected River Nene. The IDB is unlikely to grant consent for any activity which would be in conflict with the RBMP objectives.

See also Environmental Statement Chapter 17: Major Accidents and Disasters below.

Hydraulic Calculations

The Board accepts that there are agreed standard methods of designing surface water systems and, in this respect the Board would normally request that the respective surface water systems should be designed for the worst case 1% AEP (Annual Exceedance Probability), a 1 in 100 year storm, and must consider a range of durations to determine the maximum volume required with an allowance for the impact of climate change, normally 40% but could be greater, and siltation should be included within the calculations.

It is suggested that a 100% impermeability factor is used for the design of the water level and flood risk management systems. This will allow for future development, extensions to buildings etc to be accommodated and/or depreciation in efficiency of the systems, lack of maintenance etc.

The widespread flooding impacts seen on and after 23rd December 2020, particularly within north Cambridgeshire were as a consequence of heavy rainfall on December 23rd, in excess of the Long term Average (LTA), falling on an already saturated catchment which was especially sensitive to intense rainfall. Whilst no instances of flooding were reported to the LLFA, the Boards system was under extreme pressure for several days.

Current design standards do not allow for such circumstances or the special drainage arrangements within the Fens where it may take several days for the flows to be dealt with. Because of this the normal requirements concerning half drain times within a twenty four hour period are unlikely to be achieved particularly given the size of the proposed facility.

Such situations are not normally accommodated within accepted design and the Commissioners are currently reviewing its position concerning this aspect.

Environmental Statement Chapter 14: Climate

The Board acknowledges the increased risk that climate change creates on its remit including water level and flood risk management, habitats and species and other environmental and biodiversity concerns, water neutrality and a managing a decreasing resource, water quality specifically pollution control and nutrient neutrality.

As a competent authority the Board recognises its role and generally encourages the principles contained within international, national and local climate change policy with the challenge of achieving net zero. It is working with the Association of Drainage Authorities (ADA) and other relevant partners to achieve the most economic and environmentally acceptable standard.

Whilst the Board recognises that EfW operations have the potential to reduce the overall GHG emissions by redirecting waste from landfill, a significant source of methane release into the atmosphere [REDACTED], the Board request further information on how this has been assessed. The assessment must include the location of the waste materials source, how they will be transported etc. and the associated modelling. The Board would like to see how the proposed facility will help to contribute towards the Governments' legal obligation, though the Climate Change Act 2008 to cut greenhouse gas emissions by at least 68% by 2030.

In this respect the Board encourages the use of appropriate Carbon Capture and Storage (CCS) facilities and appropriate sustainable after uses and carbon reduction measures associated with the proposal as a whole.

Environmental Statement Chapter 17: Major Accidents and Disasters

The contents of the points previously raised, identified in error as the Middle Level Commissioners, are noted but remain a significant concern.

As discussed elsewhere access to a suitable water supply, the impacts of that supply on the environment and the discharge of polluted materials into the aquatic environment are of particular concern to the Board.

Yours sincerely



Graham Moore
Planning Engineer