


<b>Agenda Item No:</b>	9	
<b>Committee:</b>	Cabinet	
<b>Date:</b>	24 March 2025	
<b>Report Title:</b>	Revocation of 2 Air Quality Management Areas for Wisbech	

### Cover sheet:

#### **1 Purpose / Summary**

- 1.1 To request Cabinet, approve the revocation of 2 Air Quality Management Areas (AQMA's) for Wisbech as required by the Environment Act 1995.
- 1.2 To set out the reasons for this recommendation.
- 1.3 To update Cabinet on recent correspondence from Department of Food and Rural Affairs in relation to Fenland's air quality.
- 1.4 To update Cabinet with regard to future air quality monitoring in Wisbech.

#### **2 Key Issues**

- 2.1 Under Section 82 of the Environment Act 1995 every local authority has a duty to regularly review and assess air quality in their area, and to determine whether national air quality objectives are likely to be achieved. Where objectives are not likely to be achieved the council has a duty to declare an Air Quality Management Area (AQMA) and to take steps to improve air quality.
- 2.2 There are 4 AQMA's declared in Fenland, 3 in Wisbech and 1 in Whittlesey. All are considered compliant by Defra. This report deals with 2 of the 3 Wisbech AQMA's. Future papers will update Cabinet in relation to the remaining 2 AQMA's in Fenland.
- 2.3 In 2005 and 2006 2 AQMA's were declared in areas of Wisbech. These locations can be seen in Schedule 1. These declarations were made due to the risk of pollution from a coal fired boiler operating at a factory in Lynn Road, Wisbech. In 2009 this coal fired boiler was decommissioned thus removing the pollution source. Guidance advises the council that once 5 years of such a pollution risk is no longer present that the AQMA must be revoked.
- 2.4 Each year the council must undertake a review and assessment of local air quality issues and submit this review to Department of Food and Rural Affairs (Defra). Since 2018 Defra have responded to the council advising the revocation is required and asking for confirmation of steps being taken to publish this order. In January 2025 a further letter was received instructing this work to now be completed.
- 2.5 The covid pandemic and the MVV Medworth energy from waste plant application delayed the work to revoke these 2 AQMA's, partly due to resource limitations but in particular the local, and council, concerns about

potential pollution levels from the plant. Work has continued in partnership with Kings Lynn West Norfolk Council to ensure a robust future air quality monitoring strategy is approved before these revocations were progressed.

- 2.6 In November 2024 ward members received a briefing note setting out the proposal to revoke these AQMA's. In February 2025 residents and businesses residing within the areas of AQMA's Wisbech 1 and 2 were advised – in writing- of this revocation plan and were asked for comments to be submitted setting out any matter which may affect the council's proposal. Responses to the briefing and letters can be found in Schedule 2.
- 2.7 Due to the growth in industry within Wisbech and the approval of the Medworth energy from waste Incinerator in 2024 much consideration has been given to air quality risks within the town. Revocation of these 2 AQMA's at this time presents an opportunity to focus on the 2025 air quality monitoring strategy for Wisbech -which has never been more important.
- 2.8 The approval for the energy from waste plant requires a local monitoring strategy be implemented. Officers have set out the required level of monitoring which would be considered appropriate and MVV Medworth are duty bound to implement this strategy whilst working closely with officers from the council.

### 3 Recommendations

- 3.1 That Cabinet agrees by Order under the Environment Act 1995 Part IV to the revocation of Air Quality Management Areas Wisbech 1 and Wisbech 2 as identified in Schedule 1 to this report, following removal of the original pollution source, and therefore securing compliance with the national statutory particulate and sulphur dioxide air quality objectives.

Wards Affected	All Wisbech Wards
Forward Plan Reference	
Portfolio Holder(s)	Councillor Susan Wallwork Portfolio holder for Health, Environmental Health, CCTV, Community Safety and Military covenant.
Report Originator(s)	Annabel Tighe- Head of Environmental Health and Compliance Laura Harwood – Senior Environmental Health Officer
Contact Officer(s)	Carol Pilson – Monitoring Officer and Corporate Director Annabel Tighe – Head of Environmental Health and Compliance
Background Papers	Annual Screening Reviews of the Districts Air Quality are available on our website at <a href="#">Air quality - Fenland District Council</a>

## Report:

### **2 BACKGROUND AND INTENDED OUTCOMES**

- 2.1 Local authorities have a duty under the Environment Act 1995 to ensure air quality within their district meets national Air Quality Standards (AQS) and to report on this to Central Government. Where these standards are not being achieved the local authority is obliged to declare an Air Quality Management Area for the pollutant of concern (AQMA). Fenland has declared 4 such AQMA's in previous years. These are:

AQMA 1 Wisbech - was declared due to concerns over particulate matter levels due to the use of coal fired boilers at the canning factory. This pollution source has been removed and the site now uses gas boilers.

AQMA 2 Wisbech - declared due to concerns over the level of sulphur dioxide (SO<sub>2</sub>) due to the use of coal fired boilers at the canning factory. This pollution source has been removed and the site now uses gas boilers.

AQMA 3 Wisbech - declared due to elevated levels of nitrogen dioxide (NO<sub>2</sub>) from transport emissions.

AQMA 4 Whittlesey - declared due to concerns over sulphur dioxide levels (SO<sub>2</sub>) which were likely being emitted from brick works. This site has now ceased production.

- 2.2 Due to decommissioning of the coal fired boiler in 2009 and the subsequent removal of the associated environmental permit by the environment agency these 2 AQMA's are no longer required. They provide no additional protections or regulatory impact.
- 2.3 Each year the council produce a statutory report (Air Quality Annual Screening Review – ASR)) for submission to Department of Food and Rural Affairs (Defra). These reports demonstrate the monitoring and interventions undertaken in the district and identify the range and potential presence of sources of pollutants. The annual ASR's have identified continued compliance within the national air quality objectives. There have not been any exceedances reported in Fenland AQMA's within the last five years. Defra review the ASRs and recommend actions for air quality interventions. Over the last five years Defra have advised to start the process to revoke the AQMA's and are monitoring the progress of this work.

(Previous ASR's and Defra Appraisals can be found at [Air quality - Fenland District Council](#) )

- 2.4 The statutory air quality guidance PG22 (August 22) advises local authorities that before revoking an AQMA on the basis of measured pollutant

concentrations, the authority needs to be reasonably certain that any future exceedances are unlikely. The situation within Wisbech AQMA's 1 and 2 is as the AQMA's were declared based solely on the use of the coal fired boiler and therefore the removal of the source of pollution triggers the revocation. None the less the council has waited a number of years before proposing these revocations due to the growth of industry and in particular issues raised about the energy from waste incinerator application.

- 2.5 Concerns remain as to the impact of the MVV Medworth development on local air quality. A critical consideration will be increased traffic movements (the relevant pollutant being nitrogen dioxide which is not covered by AQMA 1 and 2) within the Wisbech area. The energy from waste incinerator was approved with conditions to implement a local air quality monitoring strategy to ensure full and transparent data collection which is to be shared with the council. This air quality monitoring strategy is appended to this report. Officers continue to meet with MVV Medworth representatives to ensure the detail of this plan is being progressed.
- 2.6 The MVV Medworth air quality monitoring strategy outlines the following commitments:
- One automatic continuous monitoring station. The equipment will analyse oxides of nitrogen (NOx), sulphur (SOx) and Particulate Matter (PM) for PM10 and PM2.5.
  - One Indicative real-time particulate monitor. The equipment will analyse particulate matter including PM10 and PM 2.5 and include real-time weather monitoring capabilities.
  - Passive air quality monitoring diffusion tubes. To measure nitrogen dioxide (NO2) and sulphur dioxide (SO2).
- 2.7 The environmental health service are committed to ensuring this monitoring strategy is effective for the communities of Wisbech and for Fenland and therefore focussed resource is being allocated to this important work as priority.

### **3 REASONS FOR RECOMMENDATIONS**

- 3.1 The council has demonstrated compliance with the national air quality objective standard for Particulates and Sulphur Dioxide (SO2) in AQMA's 1 and 2 for more than five years. In line with the statutory guidance, these AQMA's should now be revoked by 'Order' under Part IV of the Environment Act .

### **4 CONSULTATION**

- 4.1 Ward members for all Wisbech wards were informed of these proposals in November 2024. Relevant partners (Environment Agency, Town Council, County Council Public Health, Environment Agency) were informed in January

2025. Residents and businesses located within the affected wards were written to in February 2025.

4.2 Information has been made available on the council website.

4.3 Written responses can be found in Schedule 2.

## **5 ALTERNATIVE OPTIONS CONSIDERED**

5.1 There are no alternatives that would comply with the statutory policy guidance PG22 (Aug22) which states: 'There should not be any declared AQMAs for which compliance with the relevant objective has been achieved for a consecutive five-year period.'

5.2 If Cabinet chose not to support the recommendation Defra would likely instruct the council to revoke the AQMA's.

## **6 IMPLICATIONS**

### **6.1 Legal Implications**

6.1.1 An Order must be made and contain the common seal of Fenland District Council. This must be uploaded on the Local Air Quality Monitoring (LAQM) website maintained on behalf of DEFRA. It must also be made accessible to the general public. This can achieve by posting on the Local Air Quality webpage of the council's website.

### **6.2 Financial Implications**

6.2.1 There are no budget implications.

### **6.3 Equality Implications**

6.3.1 Air pollution is associated with a number of adverse health impacts. Additionally air pollution particularly affects the most vulnerable in society: children and older people, and those with heart and lung conditions. Improving air quality reduces the impact on these vulnerable groups in particular.

6.3.2 Defra have noted in their appraisals that not revoking AQMAs undermines the trust in planning controls and local air quality management. Currently any development within an AQMA requires an air quality impact assessment to be produced which is an unnecessary burden on development where these AQAMs should be revoked. This takes the focus and resources away from those developments that may not be in AQMAs but could have an impact on the local environment.

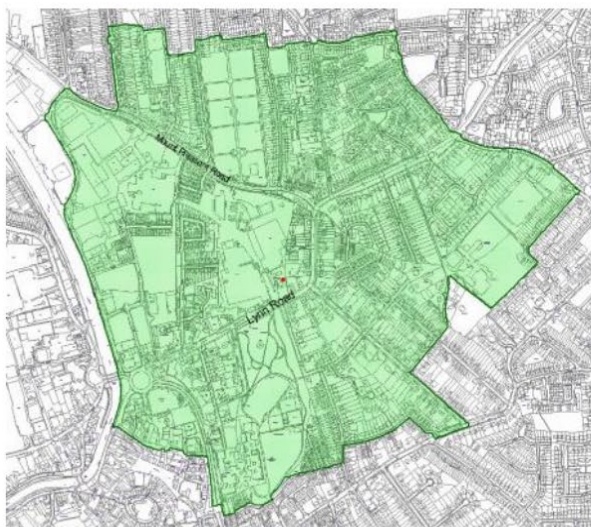
## 7 SCHEDULES

Schedule 1 – maps of the Air Quality Management Areas 1 and 2

Schedule 2 – feedback from interested parties

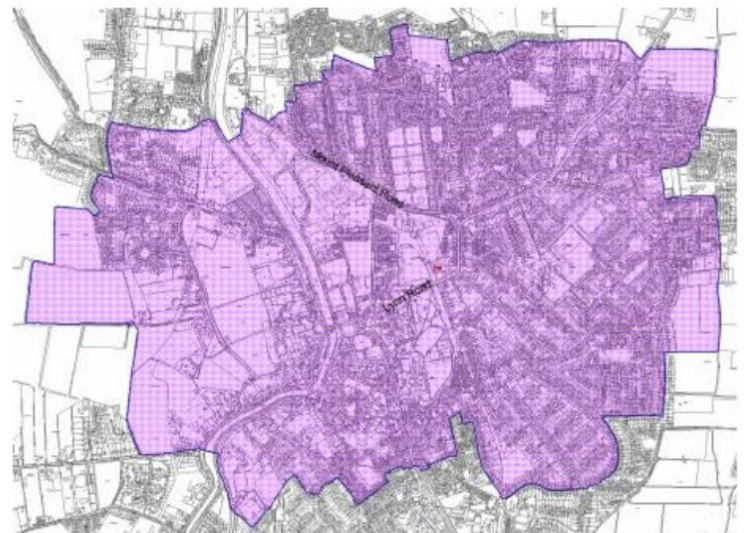
### SCHEDULE 1 Air Quality Management Areas 1 and 2

Figure 1: Particulate Matter Air Quality Management Area (AQMA 1) in Wisbech



All maps are reproduced from the Ordnance Survey map by Fenland District Council with the permission of the Controller of Her Majesty's Stationary Office. © Crown Copyright. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. Licence No 10023776, 2017

Figure 2: Sulphur dioxide Air Quality Management Area (AQMA 2) in Wisbech



All maps are reproduced from the Ordnance Survey map by Fenland District Council with the permission of the Controller of Her Majesty's Stationary Office. © Crown Copyright. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. Licence No 10023778, 2017

**SCHEDULE 2**  
**Feedback from partners and interested parties**

Feedback	Who	Response
Surely we still need them if an incinerator is coming!	Ward Councillor	The existing AQMA's relate to potential pollution from a coal fire boiler, and this has been removed. Our focus is now on monitoring and measuring potential impacts from a different source (MVV Medworth). Removing these older AQMA's will assist us to do that more robustly. If future AQMA's are required, we can implement the process again.
Hello thanks for the I information. However we can't read the 2 maps you've, feint and v small font any thoughts	Resident	An email address was provided for specific questions to be submitted.
<p>Pollution Sources Removed</p> <p>- The original AQMA's were declared in 2001 and 2006 due to high levels of PM10 (particulate matter) and SO2 (sulphur dioxide) from industrial coal burning at a local factory.</p> <p>That industrial process is no longer in operation, meaning the main pollution source has been eliminated.</p> <p>- Recent air quality monitoring has confirmed that pollutant levels are well within national limits for both PM10 and SO2.</p> <p>The council has automatic and non-automatic monitoring in place, and the data shows compliance over several years.</p> <p>According to DEFRA guidance, councils must revoke AQMA's if air quality objectives have been met for a sustained period.</p> <p>The decision to revoke these AQMA's is based on clear evidence and national guidelines, but</p>	Resident in AQMA	Agreed. Air quality review and assessment within Fenland remains a priority.

air quality management should remain an ongoing priority.		
Does this mean that the council will no longer control air quality in these areas?	Resident in AQMA	<p>No, The council remains committed to reviewing and assessing local air quality.</p> <p>The council's website sets out the steps being taken to continue and increase the level of monitoring.</p> <p>Monitoring will continue in Wisbech and this will include a network of Nitrogen Dioxide diffusion tubes, maintained by the local authorities (FDC and BCKLWN), a nitrogen dioxide and particulate matter indicative monitor maintained by the Combine Authority, and Mcerts continuous monitor reference meter for sulphur dioxide, nitrogen dioxide, and particulate matter, a indicative meter and diffusion tubes maintained by MVV.</p>
Can we be assured that the incinerator and the increased traffic it will bring will be strictly monitored whilst construction and thereafter as it will be a major pollutant	Resident in AQMA	<p>The energy from waste plant operators MVV must carry out monitoring as agreed within the air quality monitoring strategy. The council will be reviewing this monitoring data regularly and are requiring the most up to date technology be used for this monitoring.</p> <p>In addition there will be continued monitoring as above.</p>



Both maps are very difficult to read. No points of reference on either of them. 2. This is very shortsighted to remove this just as the incinerator is started development. How long will it be before another surgery is done? 12 months after it is operating? It would have been much easier and probably cheaper to keep this monitoring in place.	Resident in AQMA	Please note this revocation will not remove any monitoring. Please see above for monitoring in place or planned.
No comments made	Resident in AQMA	N/A
My understanding is FDC only respond to air quality issues after the cause. I'm concerned about the clear and obvious pollution that will be emitted by the MVV EfW incinerator. Please confirm to me that the air quality monitoring and measurements, in and around Wisbech and surrounding area, especially in the direction of the prevailing wind, will be recorded for at least 1 year in advance of the incinerator becoming operational and the records, for both before and after the incinerator is operational. to be published on FDC website on a monthly basis.	Resident in AQMA	The council have many duties in relation to both nuisance and air quality review. Annual reports are submitted to Defra taking account of local air pollution and industry.  Please see above information regarding the current and programmed monitoring.
Why cancelled Sulphur Dioxide ,as more traffic is present	Resident in AQMA	Please note sulphur dioxide is not a pollutant created by traffic. See above for planned monitoring information.



# Local Air Quality Monitoring Strategy

(Requirement 27)

November 2024

Revision 1.0  
Document ref. CP0\_R27

**We inspire  
with energy.**



# Glossary

Term	Description
<b><math>\mu\text{g}/\text{m}^3</math> (micrograms per cubic metre)</b>	A measure of concentration in terms of mass per unit volume. A concentration of $1\mu\text{g}/\text{m}^3$ means that one cubic metre of air contains one microgram (millionth of a gram) of pollutant.
<b>Adjustment</b>	Application of a correction factor to modelled results to account for uncertainties in the model.
<b>Accuracy</b>	A measure of how well a set of data fits the true value.
<b>Air quality objective</b>	A policy target generally expressed as a maximum ambient concentration to be achieved, either without exception or with a permitted number of exceedances within a specific timescale (see also air quality standard).
<b>Air quality standard</b>	The concentrations of pollutants in the atmosphere which can broadly be taken to achieve a certain level of environmental quality. The standards are based on the assessment of the effects of each pollutant on human health including the effects on sensitive subgroups (see also air quality objective).
<b>Annual mean</b>	The average (mean) of the concentrations measured for each pollutant for one year.
<b>Data capture</b>	The percentage of all the possible measurements for a given period that were valid.
<b>HSE</b>	Health, Safety and Environmental Manager
<b>Exceedance</b>	A period of time where the concentration of a pollutant is greater than the appropriate air quality standard.
<b>Ha</b>	Hectare (1 ha = 10,000 m <sup>2</sup> )
<b>kV</b>	Kilovolt (1 kV = 1000 volts)
<b>NO<sub>2</sub></b>	Nitrogen dioxide
<b>NO<sub>x</sub></b>	Nitrogen oxides (NO <sub>x</sub> = NO + NO <sub>2</sub> )
<b>PM<sub>10</sub></b>	Particulate matter with an aerodynamic diameter of less than 10 micrometres.



Term	Description
<b>PM<sub>2.5</sub></b>	Particulate matter with an aerodynamic diameter of less than 2.5 micrometres.
<b>Ratification (monitoring)</b>	Critical review of all information relating to a data set, to amend or reject the data. When the data have been “ratified” they represent the final data to be used (see also validation).
<b>SO<sub>2</sub></b>	Sulphur dioxide
<b>Validation (monitoring)</b>	Screening monitoring data by visual examination to check for spurious and unusual measurements (see also ratification).



# Acronyms

Acronym	Description
AQMA	Air Quality Management Area
ASR	Annual Status Report
AURN	Automated Urban and Rural (air quality monitoring) Network, managed by contractors on behalf of Defra
BCKLWN	Borough Council of King's Lynn and West Norfolk
CCC	Cambridgeshire County Council
CHP	Combined Heat and Power
CIEH	Chartered Institute of Environmental Health
DCO	Development Consent Order
Defra	Department for Environment, Food and Rural Affairs
DfT	Department for Transport
DNO	Distribution Network Operator
EfW	Energy from Waste
FDC	Fenland District Council
GRP	Glass Reinforced Plastic
LAQM	Local Air Quality Management
LAQMS	Local Air Quality Monitoring Strategy
LSO	Local Site Operator
MCERTS	Monitoring Certification Scheme (operated by the Environment Agency)



Acronym	Description
MVV	MVV Group companies
NCC	Norfolk County Council
QA/QC	Quality Assurance/Quality Control
TCC	Temporary Construction Compound



# Contents

---

<b>1.</b>	<b>Introduction</b>	<b>7</b>
1.1	Background	7
1.2	The Developer and their appointed specialists	7
1.3	The Authorised Development	8
1.4	Purpose of this document	9
1.5	Structure of this document	9
<b>2.</b>	<b>Summary of Consultation</b>	<b>10</b>
2.1	Background	10
2.2	Thomas Clarkson Academy	10
2.3	Fenland District Council	11
2.4	Borough Council of King's Lynn and West Norfolk	11
2.5	Combined Council Responses	11
<b>3.</b>	<b>Local Air Quality Monitoring Strategy</b>	<b>13</b>
3.1	General commitments	13
3.2	LAQMS delivery	13
3.3	Monitoring period	13
3.4	Equipment and monitoring locations	14
	Continuous Automatic Monitoring Station	14
	Indicative Real-Time Particulate Monitoring	16
	Nitrogen Dioxide Diffusion Tubes	16
	Sulphur Dioxide Diffusion Tubes	18
3.5	Complaints and investigation procedure	18
3.6	Access to real-time data	19
3.7	Quality Assurance (QA) and Quality Control (QC) procedures	20
3.8	Data reporting	20
3.9	Annual review	20
	Table 3.1: LAQMS diffusion tube monitoring locations	17
	Table A.1: Local authority monitoring locations	23
	Table B.1: Relevant air quality objectives	25
	Graphic 2.1: Proposed location for the AQMS at the Thomas Clarkson Academy	10
	Graphic 3.1: Example of a GRP enclosed continuous automatic monitoring station	15
	Graphic 3.2: Example of an Earthsense Zephyr indicative real-time particulate monitor	16

---



LOCAL AIR QUALITY MONITORING STRATEGY

Appendix A	WSP's Air Quality Team pen portraits	22
Appendix B	Local Authority Monitoring Locations	23
Appendix C	Relevant Air Quality Objectives	25

---

Figure 1	Monitoring Locations in Wisbech and along Construction Traffic Routes	
Figure 2	Monitoring Locations in Wisbech, Whittlesey and along Operational Traffic Routes	

---





# 1. Introduction

## 1.1 Background

- 1.1.1 Medworth CHP Limited (the Developer) has secured a Development Consent Order (the Order)<sup>1</sup> to construct, operate and maintain an Energy from Waste (EfW) Combined Heat and Power (CHP) Facility on the industrial estate, Algores Way, Wisbech, Cambridgeshire. Together with associated Grid Connection, CHP Connection, Access Improvements, Water Connections, Temporary Construction Compound (TCC), and an acoustic fence, these works are the Authorised Development.
- 1.1.2 The Authorised Development will recover useful energy in the form of electricity and steam from over half a million tonnes of non-recyclable (residual), non-hazardous municipal, commercial and industrial waste each year. The Authorised Development has a generating capacity of over 50 megawatts and the electricity will be exported to the grid. The Authorised Development also has the capability to export steam and electricity to users on the surrounding industrial estate.

## 1.2 The Developer and their appointed specialists

- 1.2.1 The Developer is a wholly owned subsidiary of MVV Environment Limited (MVV). MVV is part of the MVV Energie AG group of companies. MVV Energie AG is one of Germany's leading energy companies, employing approximately 6,500 people with assets of around €5 billion and annual sales of around €4.1 billion. The Authorised Development represents an investment of over £450m.
- 1.2.2 The company has over 50 years of experience in constructing, operating, and maintaining EfW CHP facilities in Germany and the UK. MVV Energie's portfolio includes a 700,000 tonnes per annum residual EfW CHP facility in Mannheim, Germany.
- 1.2.3 MVV's largest operational project in the UK is the Devonport EfW CHP Facility in Plymouth. Since 2015, this modern and efficient facility has been using up to 275,000 tonnes of municipal, commercial and industrial residual waste per year to generate electricity and heat, notably for His Majesty's Naval Base Devonport in Plymouth, and exporting electricity to the grid.
- 1.2.4 In Dundee, MVV has taken over the existing Baldovie EfW facility and has developed a new, modern facility alongside the existing facility. Operating in tandem since 2021, they use up to 220,000 tonnes of municipal, commercial and industrial waste each year as fuel for the generation of usable energy.
- 1.2.5 Biomass is another key focus of MVV's activities in the UK market. The biomass power plant at Ridham Dock, Kent, uses up to 195,000 tonnes of waste and non-recyclable wood per year to generate green electricity and is capable of exporting heat.

---

<sup>1</sup> Statutory Instrument 2024 No. 230 <https://www.legislation.gov.uk/ukSI/2024/230/schedule/1/made> (last accessed 12/11/2024)



- 1.2.6 The Developer has appointed WSP to prepare the Local Air Quality Monitoring Strategy (LAQMS), and this task has been assigned to Dr Peter Walsh and Dr Justin Lingard, members of WSP's Air Quality Team; their pen portraits are set out in **Appendix A**.

## 1.3 The Authorised Development

- 1.3.1 The Authorised Development comprises the following key components:

- The EfW CHP Facility and Site (Work Nos.1/1A/1B/2A/2B);
- CHP Connection (Work Nos.3/3A/3B);
- Access Improvements (Work Nos.4A/4B);
- TCC (Work No.5);
- Water Connections (Work Nos.6A/6B);
- Grid Connection (Work Nos.7/8/9); and
- Acoustic fence (Work No.10).

- 1.3.2 A summary description of each Authorised Development component is provided below.

- **EfW CHP Facility and Site:** A site of approximately 5.3ha located south-west of Wisbech, located within the administrative areas of Fenland District Council (FDC) and Cambridgeshire County Council (CCC). The main buildings of the EfW CHP Facility will be located in the area to the north of the Hundred of Wisbech Internal Drainage Board drain bisecting the site and will house many development elements including the tipping hall, waste bunkers, boiler house, turbine hall, air cooled condenser, air pollution control building, chimneys and administration building. The gatehouse, weighbridges, and laydown maintenance area will be located in the southern section of the EfW CHP Facility Site.
- **CHP Connection:** The EfW CHP Facility will be designed to allow the export of steam and electricity from the facility to surrounding business users via dedicated pipelines and private wire cables located along the disused March to Wisbech railway. The pipeline and cables will be located on a raised, steel structure.
- **TCC:** Located adjacent to the EfW CHP Facility Site, the compound will be used to support the construction of the Authorised Development. The compound will be in place for the duration of construction.
- **Access Improvements:** Includes access improvements on New Bridge Lane (road widening and site access) and Algores Way (relocation of site access 20m to the south).
- **Water Connections:** A new water main connecting the EfW CHP Facility into the local network will run underground from the EfW CHP Facility Site along New Bridge Lane before crossing underneath the A47 to join an existing Anglian Water main. An additional foul sewer connection is required to an existing



pumping station operated by Anglian Water located to the northeast of the Algres Way site entrance and into the EfW CHP Facility Site.

- **Grid Connection:** This comprises a 132kV electrical connection using underground cables. The Grid Connection route begins at the EfW CHP Facility Site and runs underneath New Bridge Lane, before heading north within the verge of the A47 to the Walsoken Substation on Broadend Road. From this point the cable will be connected underground to the Walsoken Distribution Network Operator (DNO) Substation.
- **Acoustic fence:** This comprises a 3m high acoustic fence fronting a residential property at 10 New Bridge Lane, Wisbech.

## 1.4 Purpose of this document

1.4.1 Schedule 2 of the Order requires the Developer to comply with and/or submit detailed information to implement the Authorised Development. Requirement 27 of Schedule 2 states:

*(1) Prior to the commencement of the authorised development, a local air quality monitoring strategy must be submitted to the relevant planning authority for approval. The local air quality monitoring strategy submitted for approval must be substantially in accordance with the outline local air quality monitoring strategy.*

*(2) The local air quality monitoring strategy must be implemented as approved under sub-paragraph (1).*

1.4.2 **Section 3** of this document provides the detailed information to discharge the pre-commencement of development conditions of Requirement 27; the Local Air Quality Monitoring Strategy (LAQMS).

## 1.5 Structure of this document

- **Section 2:** Summary of Consultation
- **Section 3:** Local Air Quality Monitoring Strategy

## 2. Summary of Consultation

### 2.1 Background

- 2.1.1 During the DCO examination, an **Outline LAQMS, Revision 3 (Volume 9.21) [REP4-015]** was developed and submitted to the Planning Inspectorate in May 2023.
- 2.1.2 A general commitment of the **Outline LAQMS** was to prepare a detailed strategy in consultation with the relevant planning authorities (CCC and Norfolk County Council (NCC)) with input from FDC and the Borough Council of King's Lynn and West Norfolk's (BCKLWN) Environmental Health Officers. Once complete, this document will be submitted for review and approval by the relevant planning authorities.
- 2.1.3 To prepare the **LAQMS**, the Developer and WSP met with the Environmental Health Officers from FDC and BCKLWN on 28<sup>th</sup> August 2024.
- 2.1.4 The Developer met with representatives of the Thomas Clarkson Academy on 3<sup>rd</sup> July and 14<sup>th</sup> August 2024 to discuss the potential siting of an AQMS at their facility.
- 2.1.5 Outcomes of these consultations have been incorporated into the final **LAQMS**, see **Section 3**. A summary of the discussions and comments provided by the respective local authorities and the Thomas Clarkson Academy during the meetings are given below.

### 2.2 Thomas Clarkson Academy

- 2.2.1 The Thomas Clarkson Academy have agreed to host the AQMS. The proposed location for the AQMS is adjacent to the hard PE multi-use sports pitches within the Academy's grounds and to the north of Weasenham Lane, see **Graphic 2.1**.

**Graphic 2.1: Proposed location for the AQMS at the Thomas Clarkson Academy**





## 2.3 Fenland District Council

- 2.3.1 In response to the presentation of the draft **LAQMS**, including the proposed distribution of nitrogen dioxide (NO<sub>2</sub>) diffusion tubes, the Environmental Officer at FDC, requested the inclusion of sulphur dioxide (SO<sub>2</sub>) diffusion tubes be reviewed, should SO<sub>2</sub> concentrations detected at the **LAQMS** be determined as high enough to suggest that SO<sub>2</sub> diffusion tube measurements were necessary. The Developer and WSP agreed to review the use of SO<sub>2</sub> diffusion tubes should 24-hour (daily) mean concentrations exceed 50% of the objective levels more than 10 times over three continuous months, subject to source apportionment and wind rose data.

## 2.4 Borough Council of King's Lynn and West Norfolk

- 2.4.1 The Senior Environmental Quality Officer at BCKLWN raised the issue of whether the **LAQMS** would include monitoring of meteorological data. Both the Developer and WSP agreed that a wind speed and wind direction sensor would be included within the **LAQMS**.
- 2.4.2 It was requested that a diffusion tube be placed alongside monitoring location number 14 (at the Thomas Clarkson Academy), where there is an existing MCERTs air quality monitor, to which the Developer and WSP agreed.
- 2.4.3 The Environmental Health Manager at BCKLWN raised the issue of calibration, data verification and provisional data. The Developer and WSP agreed that all **LAQMS** monitoring will be undertaken according to Defra's Technical Guidance on Local Air Quality Management 2022 (LAQM TG22)<sup>2</sup>, including a maintenance agreement with the chosen equipment supplier or suitable alternative company to cover routine maintenance of the equipment, monthly span checks, six monthly servicing and calibration visits as well as an allocated QA/QC provider.
- 2.4.4 An additional set of email communications via was undertaken between WSP and BCKLWN from 1<sup>st</sup> November 2024 to 8<sup>th</sup> November 2024. This was in relation to clarifying the deployment of one indicative sensor, and its location, 12 months prior to commencement of operation of the Authorised Development.

## 2.5 Combined Council Responses

- 2.5.1 FDC and BCKLWN requested that WSP submit a draft proposal for the additional diffusion tube locations. Officers were able to then review and comment on the suitability of the proposed locations. The draft LAQMS was subsequently issued to the EHO's of both FDC and BCKLWN on 27<sup>th</sup> September 2024 for final comment. EHO comments were then received back on 16<sup>th</sup> October 2024 confirming that the LAQMS was acceptable, subject to two minor points concerning inclusion of NO<sub>2</sub> sensor in the indicative monitor and the specific relocation of the indicative sensor after the initial monitoring period. These were both incorporated into the final version of the LAQMS which was re-issued to the EHO's on 17<sup>th</sup> October 2024.

---

<sup>2</sup> Defra (2022). Local Air Quality Management Technical Guidance (TG22) August 2022 [online]. Available at: <https://laqm.defra.gov.uk/wp-content/uploads/2022/08/LAQM-TG22-August-22-v1.0.pdf> (last accessed 12/11/2024)



## 12 LOCAL AIR QUALITY MONITORING STRATEGY

- 2.5.2 Concerning the continuous particulate monitor, FDC and BCKLWN supported the selection of a Zephyr<sup>3</sup>, manufactured and supplied by Earthsense, and requested the addition of a NO<sub>2</sub> sensor. Officers requested that the Zephyr monitoring data be made available within the existing monitoring dashboard, to which the Developer and WSP agreed. As requested WSP have nominated a monitoring location where the Zephyr will be sited, and officers reviewed and have approved the suitability of this location.

---

<sup>3</sup> [https://www.earthsense.co.uk/zephyr?gad\\_source=1&qclid=Cj0KCQjwrp-3BhDgARIsAEWJ6SwjarylyXguBvDCa48ipIFtVK03-fNkx0tOc461\\_vp6dsR24oFubnUaAtuBEALw\\_wcB](https://www.earthsense.co.uk/zephyr?gad_source=1&qclid=Cj0KCQjwrp-3BhDgARIsAEWJ6SwjarylyXguBvDCa48ipIFtVK03-fNkx0tOc461_vp6dsR24oFubnUaAtuBEALw_wcB) (last accessed 12/11/2024)





## 3. Local Air Quality Monitoring Strategy

### 3.1 General commitments

3.1.1 The **Outline LAQMS** provided the following general commitments which align with the outcomes of the stakeholder consultation summarised in **Section 2**:

- The approved **LAQMS** will be implemented, and the equipment maintained for the duration of the monitoring period.
- Data collected by the **LAQMS** will be published quarterly on the Developer's website and, if requested, issued to the relevant planning authority.
- All staff employed at the EfW CHP Facility will be suitably qualified and competent, including the Health, Safety and Environmental Manager<sup>4</sup> (HSE). Once employed, the HSE Manager will produce the quarterly report. The quarterly report will include details of any exceedances, their investigation and, if attributed to the EfW CHP Facility, action to be taken to remedy the situation within an agreed timescale.
- To assist with other local air quality initiatives, the Developer agrees to share with both BCKLWN and FDC, by remote secure access, the information collected by the **LAQMS**.
- All data will be quality controlled in accordance with Defra's LAQM TG22 air quality guidance<sup>2</sup>.

3.1.2 How these commitments will be met as part of the **LAQMS** are given below.

### 3.2 LAQMS delivery

3.2.1 As noted in **Paragraph 1.2.6**, WSP have prepared the **LAQMS** on behalf of the Developer and day-to-day delivery will initially be the responsibility of WSP. Once employed, responsibility will transfer over to the Developer's HSE Manager.

3.2.2 Alternative suitably qualified specialists may be appointed by the Developer, if required, to deliver the LAQMS.

### 3.3 Monitoring period

3.3.1 The **LAQMS** equipment will be installed in the locations set out below in **Section 3.4** and operational prior to the commencement<sup>5</sup> of the Authorised Development.

---

<sup>4</sup> Suitable qualifications could include being a member of the Institute of Air Quality Management (IAQM) or Chartered Institute of Environmental Health (CIEH))

<sup>5</sup> Commencement is defined under Article 2 of the Order see Statutory Instrument 2024 No. 230 <https://www.legislation.gov.uk/uksi/2024/230/schedule/1/made> (last accessed 12/11/2024)



- 3.3.2 The **LAQMS** equipment will be removed after the fourth anniversary of the date of final commissioning<sup>6</sup> at the EfW CHP Facility.

### 3.4 Equipment and monitoring locations

- 3.4.1 Air quality monitoring equipment will be installed at the locations identified in **Table 3.1**. The monitoring locations in Wisbech are shown in **Figure 1** together with the proposed construction vehicle routes and the local authority air quality monitoring locations operated by FDC<sup>7</sup> and BCKLWN<sup>8</sup>. The monitoring locations include those within 200m of the construction and operational vehicle routes and those within Wisbech and the surrounding villages. Details of the local authority monitoring locations are given in **Appendix B**.
- 3.4.2 **Figure 2** provides similar information but shows a wider extent covering Wisbech and Whittlesey. It includes the proposed operational vehicle routes, the monitoring locations operated by FDC and BCKLWN, and the two continuous SO<sub>2</sub> automatic monitoring stations in Whittlesey.
- 3.4.3 **Figure 1** includes the location and extent of the Air Quality Management Areas (AQMA) declared by FDC in Wisbech and **Figure 2** includes the AQMA in Wisbech and Whittlesey<sup>9</sup>.

#### Continuous Automatic Monitoring Station

- 3.4.4 One continuous automatic monitoring station will be installed at the Thomas Clarkson Academy in Wisbech. This reflects the location chosen to site the continuous automatic monitoring station used during the baseline monitoring campaign carried out in 2018 to support the air quality assessment presented in the **Environmental Statement (ES) Chapter 8: Air Quality Revision 1 (Volume 6.2) [APP-035]**. The Thomas Clarkson Academy lies north-east of the EfW CHP Facility Site, as shown in **Figure 1**.

---

<sup>6</sup> Final commissioning is defined under Article 2 Order, see Statutory Instrument 2024 No. 230 <https://www.legislation.gov.uk/uksi/2024/230/schedule/1/made> (last accessed 12/11/2024)

<sup>7</sup> Fenland District Council (2023). *2023 Air Quality Annual Status Report* [online]. Available at: [https://www.fenland.gov.uk/media/20305/Air-Quality-Annual-Status-Report-2023/pdf/ASR\\_Template\\_England\\_2023\\_Fenland.pdf?m=1696844848267](https://www.fenland.gov.uk/media/20305/Air-Quality-Annual-Status-Report-2023/pdf/ASR_Template_England_2023_Fenland.pdf?m=1696844848267). (last accessed 12/11/2024)

<sup>8</sup> Borough Council of King's Lynn and West Norfolk (2024). *2024 Air Quality Annual Status Report* [online]. Available at: [https://www.west-norfolk.gov.uk/info/20137/air\\_quality/169/air\\_quality\\_information](https://www.west-norfolk.gov.uk/info/20137/air_quality/169/air_quality_information). (last accessed 12/11/2024)

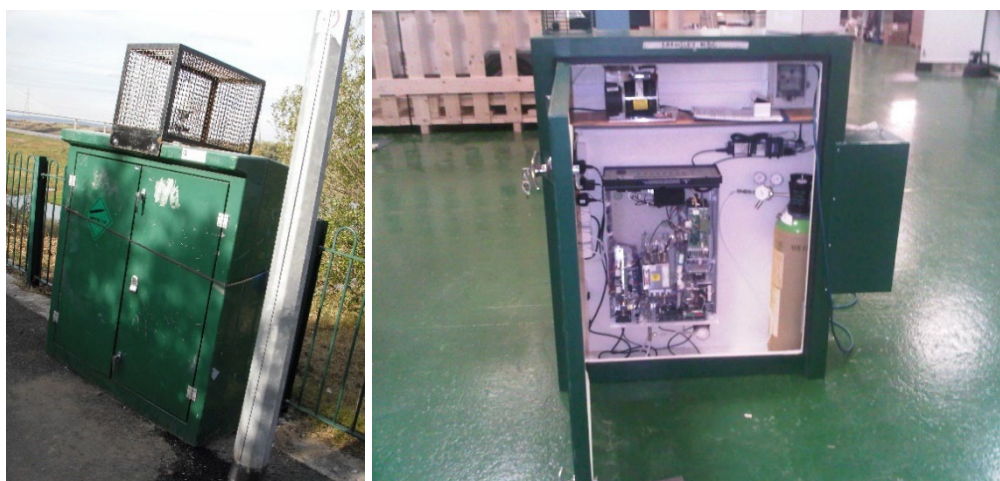
<sup>9</sup> The four AQMA in Wisbech and Whittlesey are:

- 1) Wisbech AQMA No. 1 declared for exceedances of the 15-minute SO<sub>2</sub> objective ([https://uk-air.defra.gov.uk/aqma/details?aqma\\_ref=130](https://uk-air.defra.gov.uk/aqma/details?aqma_ref=130));
- 2) Wisbech AQMA No. 2 declared for exceedances of the 24-hour mean PM<sub>10</sub> objective ([https://uk-air.defra.gov.uk/aqma/details?aqma\\_ref=131](https://uk-air.defra.gov.uk/aqma/details?aqma_ref=131));
- 3) Wisbech AQMA No. 3 declared for exceedances of the annual mean NO<sub>2</sub> objective ([https://uk-air.defra.gov.uk/aqma/details?aqma\\_ref=456](https://uk-air.defra.gov.uk/aqma/details?aqma_ref=456)); and
- 4) Whittlesey AQMA No. 1 declared for exceedances of the 15-minute SO<sub>2</sub> objective ([https://uk-air.defra.gov.uk/aqma/details?aqma\\_ref=465](https://uk-air.defra.gov.uk/aqma/details?aqma_ref=465)).



- 3.4.5 The equipment installed will provide near real-time measurements (<1hr) that can be used to inform ongoing levels of pollutants. The pollutants to be measured and measurement methods are given below:
- Oxides of nitrogen (NO, NO<sub>x</sub> and NO<sub>2</sub>) will be measured using a Teledyne model N200 Chemiluminescence Analyser<sup>10</sup>;
  - Sulphur dioxide (SO<sub>2</sub>) levels will be derived from a Teledyne model N100 UV Fluorescence Analyser<sup>11</sup>; and
  - Particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) will be measured using a Palas Fidas 200; this has received MCERTS approval for continuous ambient air quality monitoring<sup>12</sup>.
- 3.4.6 The measurement methods and techniques<sup>13</sup> chosen are consistent with those used by Defra in the Automated Urban and Rural Network (AURN), as well as FDC and BCKLWN, to determine air quality levels and trends.
- 3.4.7 The station will consist of a small Glass Reinforced Plastic (GRP) enclosure to accommodate the equipment, see **Graphic 3.1**. The enclosure will be installed adjacent to a hard PE multi-use sports pitch approximately 100m north of Weasenham Lane, with protective fencing on one side.

**Graphic 3.1: Example of a GRP enclosed continuous automatic monitoring station**



- 3.4.8 Measurements of wind speed and direction will also be made at this location using a sonic anemometer installed at height, i.e., attached to an adjacent lamp post or nearby fence post. These measurements will be used to determine the prevailing wind conditions and to inform investigation of complaints associated with the

<sup>10</sup> <https://www.et.co.uk/products/nox-chemiluminescence-no-no%E2%82%82-nox-analyser-model-n200/> (last accessed 12/11/2024)

<sup>11</sup> <https://www.et.co.uk/products/so%E2%82%82-uv-fluorescence-analyser-model-n100/> (last accessed 12/11/2024)

<sup>12</sup> <https://uk-air.defra.gov.uk/networks/monitoring-methods?view=mcerts-scheme> (last accessed 12/11/2024)

<sup>13</sup> <https://uk-air.defra.gov.uk/networks/monitoring-methods?view=eu-standards> (last accessed 12/11/2024)

dispersion of emissions from the Authorised Development during the operational phase.

- 3.4.9 If, for unforeseen circumstances, the continuous automatic monitoring station must be relocated, an alternative suitable location will be agreed with the environmental health officers at BCKLWN and FDC.

### Indicative Real-Time Particulate Monitoring

- 3.4.10 One Earthsense Zephyr<sup>14</sup> indicative real-time particulate monitor will be installed to measure PM<sub>10</sub>, PM<sub>2.5</sub> and NO<sub>2</sub>. This device has received MCERTS approval for indicative particulate monitoring<sup>15</sup> and is used by BCKLWN to provide similar measurements. These measurements will complement the particulate matter and NO<sub>2</sub> readings provided by the continuous automatic monitoring station at the Thomas Clarkson Academy.

#### Graphic 3.2: Example of an Earthsense Zephyr indicative real-time particulate monitor



- 3.4.11 At the commencement of development, which is in excess of 12 months prior to operation of the Authorised Development, the indicative real-time monitor will be sited at BCKLWN diffusion tube monitoring location 100 on Chapnall Road, Walsoken.
- 3.4.12 It will be co-located with diffusion tube 100 (as shown in **Figure 1**) and attached to available street furniture.

### Nitrogen Dioxide Diffusion Tubes

- 3.4.13 Routine NO<sub>2</sub> monitoring will be undertaken in Wisbech using diffusion tubes at the 13 locations detailed in **Table 3.1** and shown in **Figure 1**. These locations are

---

<sup>14</sup> <https://www.earthsense.co.uk/zephyr> (last accessed 12/11/2024) or suitable alternative

<sup>15</sup> <https://www.csagroup.org/en-gb/services/mcerts/mcerts-product-certification/mcerts-certified-products/mcerts-certified-products-indicative-ambient-particulate-monitors/> (last accessed 12/11/2024)



consistent with the baseline monitoring locations presented in the **ES Chapter 8: Air Quality, Revision 1 (Volume 6.2) [APP-035]**.

**Table 3.1: LAQMS diffusion tube monitoring locations**

Site ID	Site location	Site type	Site coordinates (based on OS grid reference, m)		In AQMA?	Distance to kerb (m)	Approximate Distance to the EfW CHP Facility Site (km) <sup>16</sup>
			X	Y			
1	Thomas Clarkson Academy	Roadside	546612	308501	No	3.9	1.1
2	New Bridge Lane	Roadside	545331	307796	No	1.2	0.1
3	New Drove	Roadside	546453	308232	No	1.8	0.8
4	Cromwell Road	Roadside	545503	308691	No	1.2	0.6
5	Cromwell Road	Roadside	544979	307825	No	2.4	0.4
6	Wisbech Bypass (A47)	Suburban	545729	307468	No	15.0	0.4
7	Weasenham Lane	Roadside	546600	308401	No	1.6	1.0
8	Weasenham Lane	Roadside	546444	308355	No	0.8	0.9
9	Railway Road	Roadside	546215	308856	No	1.4	1.0
10	Algores Way	Roadside	546106	308390	No	1.6	0.6
11	Elm High Road	Roadside	547083	307871	No	2.3	1.4
12	Elm High Road	Roadside	546904	308258	No	5.5	1.3
13	Churchill Road	Roadside	546531	309265	Yes	1.7	1.5

- 3.4.14 Tubes will be deployed following Defra's NO<sub>2</sub> diffusion tube calendar<sup>17</sup>, this will ensure that tube changeovers and exposure periods are consistent with those deployed by FDC and BCKLWN allowing for easy comparison of datasets. All tubes will be installed at a minimum height of 2.4m to limit interference and tampering.
- 3.4.15 Diffusion tubes using 50% triethanolamine (TEA) in acetone will be supplied and analysed by an accredited UKAS Testing laboratory. Socotec (certificate number 1252) currently supply and analyse tubes for both FDC and BCKLWN and will be approached by the Developer to provide the service, though alternatives may be sought, if necessary.
- 3.4.16 Diffusion tube monitoring will take place predominantly along key routes in Wisbech, complementing current measurements undertaken by FDC and BCKLWN. These

<sup>16</sup> Distance is measured from the diffusion tube monitoring location to the nearest point on the EfW CHP Facility Site boundary.

<sup>17</sup> <https://laqm.defra.gov.uk/air-quality/air-quality-assessment/diffusion-tube-monitoring-calendar/> (last accessed 12/11/2024)



measurements will be used to determine changes in NO<sub>2</sub> levels that maybe a consequence of the construction and operation of the Authorised Development.

- 3.4.17 As agreed with FDC and BCKLWN, routine NO<sub>2</sub> monitoring outside of Wisbech and away from the routes used by construction and operational traffic, will be undertaken in the surrounding villages of West Walton<sup>18</sup>, Walton Highway, Walpole Highway, Marshland St. James and Emneth. Diffusion tubes will be deployed in the centre of each village at kerbside locations. The duration of this additional monitoring will follow the same period as the deployment of the wider air quality monitoring undertaken as part of this LAQMS.

### Sulphur Dioxide Diffusion Tubes

- 3.4.18 As agreed with FDC and BCKLWN, routine monitoring of SO<sub>2</sub> using diffusion tubes will only be implemented if specific criteria (given below) are breached.
- 3.4.19 SO<sub>2</sub> data recorded by the continuous monitoring station will be reviewed on a rolling 3-month basis and compared against the 24-hour mean SO<sub>2</sub> objective of 125µg/m<sup>3</sup>. A threshold of 10 exceedances of 50% of the 24-hour mean SO<sub>2</sub> objective, i.e., 62.5µg/m<sup>3</sup>, will be used to determine the need for routine monitoring.
- 3.4.20 The monitoring strategy shall be reviewed if this threshold is breached and appropriate comparisons with available local authority data will be undertaken to identify the potential source and/or conditions that have led to levels above the threshold before implementing additional monitoring. This approach recognises that there are other potential industrial sources of SO<sub>2</sub> that could lead to elevated levels being detected in Wisbech<sup>9</sup>.

## 3.5 Complaints and investigation procedure

- 3.5.1 The procedure for reporting and investigating complaints and, if attributed to the EfW CHP Facility, action to be taken to remedy the situation is given below. Information provided in the quarterly report is detailed at **Section 3.8**.
- 3.5.2 Complaints relating to air quality can be registered by contacting the Developer's Community Liaison Manager and/or the Project Director . The following details will be required, as a minimum, for the complaint to be registered and investigated:
- Date
  - Time
  - Location
  - Nature of complaint
  - Contact details

---

<sup>18</sup> BCKLWN monitoring location 99 lies on School Road in West Walton.



- 3.5.3 The Developer will undertake an investigation of the complaint and contact the complainant if any further details are required. Where a complaint can be dealt with straight away, the Developer will do so and inform the complainant of the outcome.
- 3.5.4 If necessary, further investigation will be undertaken to ensure a comprehensive response can be provided to the complainant. This will include interrogation of weather and air quality monitoring data, as well as a review of all activities taking place in the area. The complainant will be updated as the investigation progresses.
- 3.5.5 Where complaints require an investigation to be undertaken by an external body due to the specialist nature of the issue, a suitably competent person or organisation may be engaged to assist with the investigation. These may include specialist staff appointed by the Developer. The complainant will be notified periodically as the investigation progresses.
- 3.5.6 Once the complaint has been resolved, the complainant will be notified of the outcome. If the complainant is dissatisfied, they may request that their complaint is escalated to MVV's Communications and Community Relations Manager in the first instance, who will review the complaint and any investigation, reporting back to the complainant on their findings.
- 3.5.7 Should the complainant remain unsatisfied with the outcome, the complaint will be escalated further to a Managing Director.
- 3.5.8 The complaints and investigation procedure for members of the public is the same and can be initiated by contacting the Developer's Community Liaison Manager and/or the Project Director, via the contact details provided on site notice boards and on the Developer's project-specific website.
- 3.5.9 From commencement of development and for the duration of the **LAQMS**, local air quality monitoring will be a standing item on the agenda at future local liaison group meetings.

### 3.6 Access to real-time data

- 3.6.1 Access to real-time **LAQMS** data will be provided to both BCKLWN and FDC via a monitoring supplier data dashboard. Separate usernames and passwords will be provided to identified staff at both local authorities providing access to the data but will not include editing or administration rights.
- 3.6.2 Likewise, access to real-time Zephyr data will be provided to both BCKLWN and FDC via a monitoring supplier data dashboard with separate usernames and passwords being provided to identified staff allowing access to the data but no editing or administration rights.
- 3.6.3 Monitoring data for the **LAQMS** will be initially supplied as flagged provisional data on the data dashboard, until it is ratified. The monitoring system will include auto data reporting, where agreed average data for set sampling durations will be reported, and any threshold exceedances will result in email alerts being issued.



### 3.7 Quality Assurance (QA) and Quality Control (QC) procedures

- 3.7.1 All monitoring data will be collated, ratified and verified in line with Defra's LAQM TG22 guidance.
- 3.7.2 QA and QC of the continuous automatic monitoring data will follow the data validation and ratification principles used in Defra's AURN air quality monitoring network<sup>19</sup> ensuring the provision of robust and defensible data.
- 3.7.3 Servicing and maintenance of the continuous automatic monitoring equipment will be undertaken once every six months by the supplier.
- 3.7.4 A third party suitably qualified organisation will undertake equipment calibration.
- 3.7.5 Local Site Operator duties will be undertaken by either the equipment supplier or a dedicated service provider and will follow the principles set out by the Environment Agency for the operation of Defra's AURN air quality monitoring network<sup>20, 21</sup>.
- 3.7.6 NO<sub>2</sub> diffusion tube sampling and analysis will also follow current Local Air Quality Management guidance<sup>22</sup>.

### 3.8 Data reporting

- 3.8.1 The Developer's HSE Manager will undertake weekly (as a minimum) checks to ensure that the real-time monitoring station(s) is operational and providing data.
- 3.8.2 Quarterly reports will also be collated by the Developer's HSE Manager, a quarter in arrears, to accommodate the inclusion of diffusion tube data. Confirmation of the ratification status, data capture and measured levels, benchmarked against the relevant air quality objectives, given in **Appendix C**, will be included in the report.
- 3.8.3 Any additional and/or unusual activity in the vicinity of the particulate monitoring equipment will be noted in the report, particularly where this may have an impact on the data; for example, local road works and bonfire night will contribute significantly to particulate levels.

### 3.9 Annual review

- 3.9.1 For the duration of the **LAQMS** and following the issue of the fourth quarterly review, an annual review meeting will take place between the Developer, FDC and

---

<sup>19</sup> <https://uk-air.defra.gov.uk/assets/documents/Data Validation and Ratification Process Apr 2017.pdf> (last accessed 12/11/2024)

<sup>20</sup> Environment Agency (2021). *Automatic Urban and Rural Network (AURN) LSO Manual - Part A, version 1.1* [online]. Available at: [https://uk-air.defra.gov.uk/assets/documents/reports/empire/Isoman/AURN\\_LSO\\_Manual\\_Part\\_A\\_Version\\_1.1\\_October\\_2021.pdf](https://uk-air.defra.gov.uk/assets/documents/reports/empire/Isoman/AURN_LSO_Manual_Part_A_Version_1.1_October_2021.pdf). (last accessed 12/11/2024)

<sup>21</sup> Environment Agency (2022). *Automatic Urban and Rural Network (AURN) LSO Manual - Part B, version 1.2* [online]. Available at: [https://uk-air.defra.gov.uk/assets/documents/reports/empire/Isoman/AURN\\_LSO\\_Manual\\_Part\\_B\\_Version\\_1.2\\_November\\_2022\\_Issue\\_1.pdf](https://uk-air.defra.gov.uk/assets/documents/reports/empire/Isoman/AURN_LSO_Manual_Part_B_Version_1.2_November_2022_Issue_1.pdf). (last accessed 12/11/2024)

<sup>22</sup> AEA Technology (2008). *Diffusion Tubes for Ambient NO<sub>2</sub> Monitoring: Practical Guidance AEA/ENV/R/2504 - Issue 1a*. [online]. Available at: [https://laqm.defra.gov.uk/documents/0802141004\\_NO2\\_WG\\_PracticalGuidance\\_Issue1a.pdf](https://laqm.defra.gov.uk/documents/0802141004_NO2_WG_PracticalGuidance_Issue1a.pdf). (last accessed 12/11/2024)



## 21 LOCAL AIR QUALITY MONITORING STRATEGY

BCKLWN. The meeting will review results and, if required, consider any variations to the established **LAQMS**.

- 3.9.2 Any material variations to the **LAQMS**, such as the relocation of Zephyr equipment, will be agreed in writing between the Developer, FDC and BCKLWN and notification sent to CCC and NCC. Variations to the **LAQMS** will be reported to the local liaison group at the next scheduled meeting.



## Appendix A WSP's Air Quality Team pen portraits

**Dr Peter Walsh, Technical Director Air Quality WSP UK Ltd:** Peter has 29 years' experience of sampling and analysis of environmental contaminants and health impact assessment. Peter is familiar in the regulation of industrial processes, including enforcement of conditions on air quality, odour management and abatement. He has knowledge on management of air quality monitoring stations, establishing new monitoring stations, both in the UK and overseas. Peter also has an extensive experience in a senior enforcement role within the UK environment regulatory system. Prior to WSP, Peter held air quality roles in two local authorities (Torbay and Newham), as well as operating as an environmental scientist in analytical laboratories within several institutions including a Public Analysts. Peter is a full member of both the Institute of Air Quality Management (MIAQM) and Institute of Environmental Science (MIEnvSc) as well as a Chartered Environmentalist (CEnv).

**Dr Justin Lingard, Associate Air Quality Specialist WSP UK Ltd:** Justin has over 15 years of measurement and modelling experience. He has provided services to private and government clients covering transport, land development and local air quality management sectors. His experience includes working on the delivery of high-level policy assessments and large infrastructure projects, such as the appraisal of sustainability for the draft Airports National Policy Statement, for DfT, and the A66 Northern Trans-Pennine Project for National Highways. Prior to joining WSP in 2016, he worked for Ricardo Energy & Environment gaining over seven years' experience on large UK Government programmes, delivering air quality services to Defra, the Scottish Government and the Government of Gibraltar including the provision of air quality monitoring data to national compliance networks. Having successfully gained his PhD from the University of Leeds in 2004, he worked as an academic researcher characterising marine and urban aerosols for five years prior to entering commercial consultancy. He is also a full member of both the Institute of Air Quality Management (MIAQM) and Institute of Environmental Science (MIEnvSc) and a Chartered Scientist (CSci).





## Appendix B Local Authority Monitoring Locations

The monitoring locations operated by FDC and BCKLWN shown in both **Figure 1** and **Figure 2** are given in **Table A.1**. These include monitoring locations within 200m of the construction and operational vehicle routes, those within Wisbech and the surrounding villages, and the two continuous automatic SO<sub>2</sub> automatic monitoring stations in Whittlesey.

**Table A.1: Local authority monitoring locations**

Site ID	Site Name	Site Type	Site coordinates (based on OS grid reference, m)		Pollutants Monitored	In AQMA?
			X	Y		
Fenland District Council						
Continuous Automatic Monitoring Station						
AM1	Park Lane	Urban Background	526382	296859	SO <sub>2</sub>	Yes, Whittlesey AQMA 1
AM2	Bradley Fen	Industrial	523924	297974		
Passive Diffusion Tube						
S3	Ramnoth Road	Roadside	546860	308532	NO <sub>2</sub>	Yes, Wisbech No.3
S5	Churchill Road	Roadside	546415	309602		Yes, Wisbech No. 1, 2 & 3
S8	Westmead Ave	Kerbside	546890	308368		Yes, Wisbech No. 3
S9	Thorney Toll	Roadside	534526	303907		No
S12	Lynn Road AWS	Urban Background	546592	310191		Yes, Wisbech No. 1 & 2
S13	Lynn Road/Mt Pleasant	Roadside	546664	310342		Yes, Wisbech No. 1 & 2
S14	Aldi, Chatteris	Roadside	538976	287094		No
S15	Weasenham Lane	Roadside	546818	308568		Yes, Wisbech No. 3



Site ID	Site Name	Site Type	Site coordinates (based on OS grid reference, m)		Pollutants Monitored	In AQMA?
			X	Y		
S16	Lynn Road R/A	Kerbside	546238	309981	NO <sub>2</sub>	Yes, Wisbech No. 1, 2 & 3
S17	Weasenham Lane/Cromwell Road	Roadside	545509	308735		No
S20	Napier Court	Roadside	546481	309387		Yes, Wisbech No. 1 & 3
S26	Peas Hill R/A	Kerbside	540245	297613		No
S31	White Lion, Wisbech	Roadside	545986	309618		Yes, Wisbech, No. 1
S32	North End, Wisbech	Roadside	545997	310092		Yes, Wisbech No. 1
S33	Weasenham Lane/New Drove, Wisbech [B198]	Roadside	546567	308374		No
S34	Weasenham Lane AQY, Wisbech	Roadside	546756	308522		Yes, Wisbech No. 3
S36	Gaul Road, March	Roadside	450918	296641		No
S41	Knights End Road, March	Roadside	540578	294878		No

Borough Council of King's Lynn and West Norfolk						
Passive Diffusion Tube						
99	108 School Road, Wisbech	Suburban	547960	313115	NO <sub>2</sub>	No
100	83 Chapnall Road, Wisbech	Suburban	547902	310395		No
101	62 Elm High Road, Wisbech	Roadside	547094	307850		No
110	14 Elm High Rd, Wisbech	Roadside	546884	308315		No



## Appendix C Relevant Air Quality Objectives

The air quality objectives and limit values for the protection of human health are given in **Table B.1**.

**Table B.1: Relevant air quality objectives**

Pollutant	Concentration ( $\mu\text{g}/\text{m}^3$ )	Objective	Measured as
Nitrogen dioxide ( $\text{NO}_2$ )	40	Limit value not to be exceeded.	Annual mean
	200	Not to be exceeded more than 18 times a year.	1-hour (hourly) mean
Particulate matter less than 10 micrometres in diameter ( $\text{PM}_{10}$ )	40	Limit value not to be exceeded.	Annual mean
	50	Not to be exceeded more than 35 times a year.	24-hour (daily) mean
Particulate matter less than 2.5 micrometres in diameter ( $\text{PM}_{2.5}$ )	20	Limit value not to be exceeded.	Annual mean
	12	Interim target concentration not to be exceeded by the end of January 2028.	Annual mean
	10	Target concentration not to be exceeded by the end of 2040.	Annual mean
Sulphur dioxide ( $\text{SO}_2$ )	125	Not to be exceeded more than 3 times a year.	24-hour (daily) mean
	350	Not to be exceeded more than 24 times a year.	1-hour (hourly) mean
	266	Not to be exceeded more than 35 times a year.	15-minute mean

