

Technical Note

Air Quality Consultants Limited
First Floor, Patten House
Warrington, WA1 2BA
United Kingdom
Tel +44 (0) 1925 937 195
Email: contact@aqcconsultants.co.uk
Website: www.aqcconsultants.co.uk

To	Environment Agency Permitting Support, NPS Sheffield Quadrant 2 99 Parkway Avenue Parkway Business Park Sheffield S9 4WF	Date	16 August 2023
		Our Reference	12417A-10-R04-01
		Application No	EPR/HP3441QA/A001
		Issued By	Adam Clegg (Technical Director)
		Approved By	Andy Collins (Associate Director)

Subject **RESPONSE TO SCHEDULE 5 NOTICE OF REQUEST FOR MORE INFORMATION**

Introduction

An application for an environmental permit to operate the Medworth Energy from Waste Combined Heat and Power Facility (the 'EfW CHP Facility') was submitted by Medworth CHP Limited (the 'Operator') to the Environment Agency ('EA') on 4 August 2022. As part of the determination of this application, the EA has requested further information by letter dated 20 July 2023. This note has been prepared to provide a response to the Schedule 5 further information request from the EA.

Within this response, the original request from the EA is provided in bold italic text, with the response provided in normal body text.

Air Quality

The following questions relates to the risk assessment of emissions to air and the Air Quality Technical Report (ref. EN010110 Vol 6.4, revision 2.0), dated February 2023.

1. Provide / update the following data tables as an updated to Annex H: Modelling Results:

- i. Modelled monthly average hydrogen fluoride (HF) concentrations ($\mu\text{g m}^{-3}$).***
- ii. Modelled 1-hour average hydrogen chloride (HCl) concentrations ($\mu\text{g m}^{-3}$).***
- iii. Table 8B.H15 is stated to present 1-hour volatile organic compounds (VOC) concentrations. Confirm if this data is instead presenting daily average VOC***

concentrations (as benzene), as inferred from Table 8B2.4. Update or replace the table if required.

- iv. Update Table 8B6.9 to include the pollutants dioxins and polychlorinated biphenyls (PCBs).**

Provision of the above new / revised tables is required to allow a clear and transparent summary of air emissions to be included in our Decision Document. Provision of the new / revised tables and the existing tables in Annex H of the Air Quality Technical Report in Excel format is requested if these are available.

Response: An Excel file containing all modelled results (original and updated as required by the Schedule 5 notice) accompanies this response. Monthly average HF concentrations have not been modelled in the assessment, since there are several constraints which prevent a concentration averaged over this period being modelled. ADMS only allows output averaged over the entire meteorological dataset i.e., an annual mean, or for shorter-term periods up to a maximum averaging period of one week. However, in its *Addendum guidelines for halogen and hydrogen halides in ambient air for protecting human health against acute irritancy effects*, Defra's Expert Panel on Air Quality Standards (EPAQS) states:

"It is unlikely that the ambient monthly mean would approach this value if the 1-hour guideline value for irritancy for hydrogen fluoride is not exceeded as an air pollutant emitted from a chimney stack."

As there are no exceedances of the 1-hour guideline value for HF, and as hourly mean PECs are comfortably below the monthly mean guideline value, it is highly unlikely that there would be any exceedances of the monthly mean guideline.

2. Provide a justification for using the environmental standard (ES) for benzene as a proxy for annual VOC emissions instead of the lower ES for 1,3-butadiene.

Response: VOC emissions to air from the thermal treatment process will include a range of different organic species whose speciation is not available due to there being no regulatory requirement to monitor speciated VOC emissions. Where speciation is not available, use of the benzene assessment level as a proxy for assessing the impacts of VOC emissions as a group is consistent with the approach required by the EA in its guidance document *Air emissions risk assessment for your environmental permit*¹:

"If you release volatile organic compounds into the air and do not know what all the substances in them are, treat them all as 100% benzene in your risk assessment. If you want to treat them as something else, you'll need to explain why."

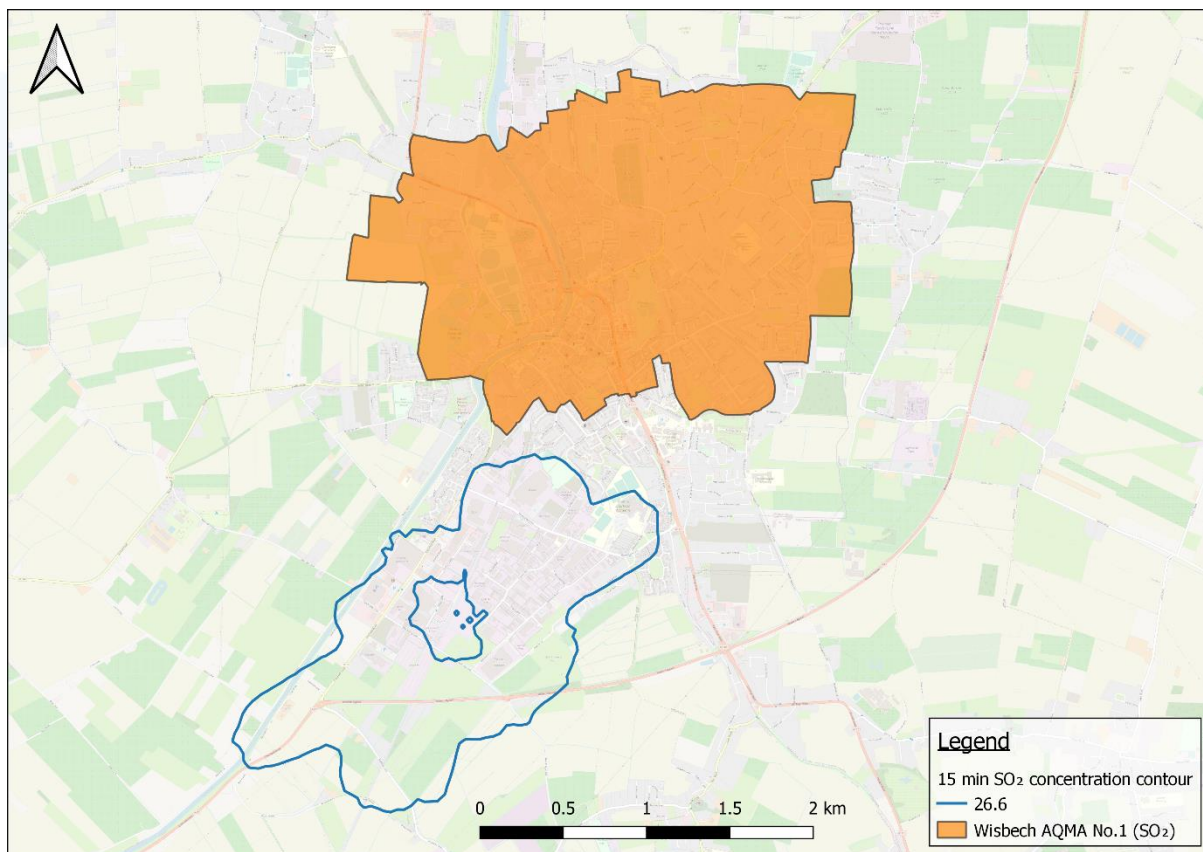
¹ <https://www.gov.uk/guidance/air-emissions-risk-assessment-for-your-environmental-permit>

As part of pre-application consultation, the proposed methodology to be used for the air quality assessment, including treatment of VOC emissions, was shared with the EA in June 2020². The EA's response was returned on 6 October 2020 and did not raise concerns over the use of benzene as a proxy for VOC emissions.

3. Provide three new contour plots to show the PC (as % of EAL) for sulphur dioxide (SO₂) (15-minute mean), PM₁₀ (24-hour mean) and nitrogen dioxide (NO₂) (annual mean). For each contour plot, include the location of the corresponding Wisbech Air Quality Management Area (AQMA), to clearly demonstrate if the PC is predicted to be above or below 1% of the ES for each AQMA.

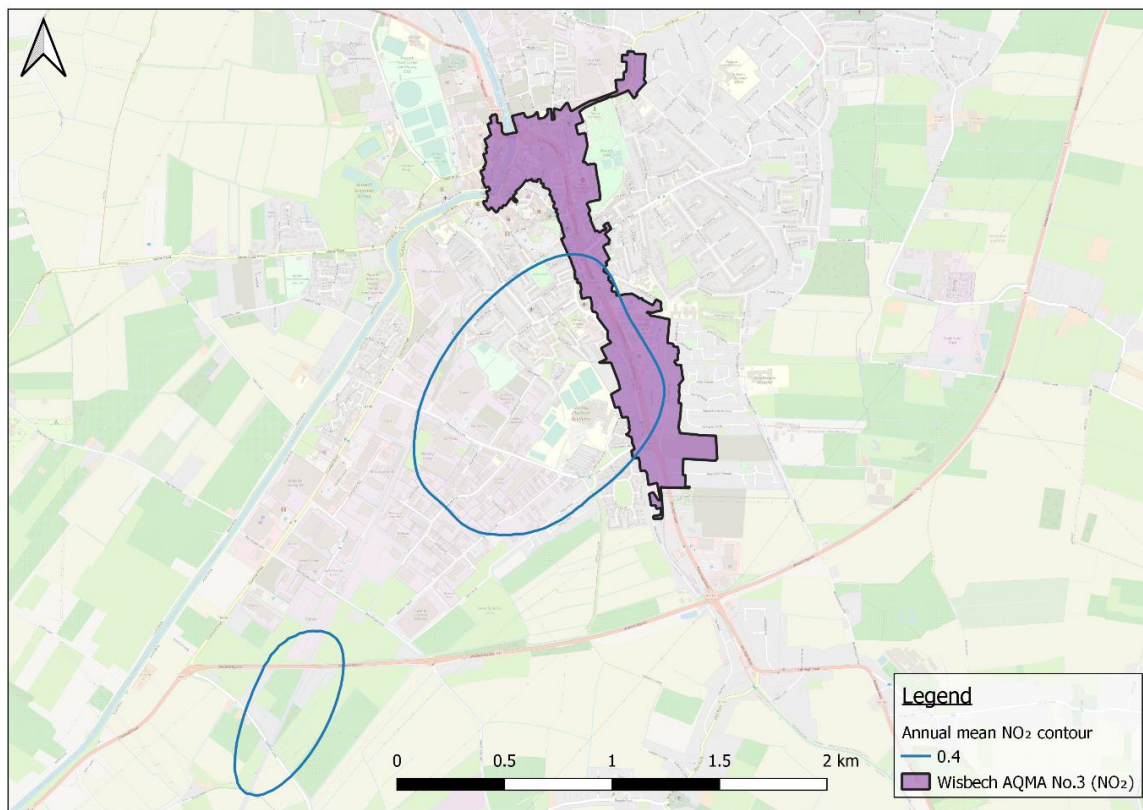
Response: Concentration isopleths are provided below which depict the ground level process contributions of SO₂, NO₂ and PM₁₀ in units of µg/m³. For 15-minute mean process contributions (PC), a concentration isopleth representing 10% of the air quality objective has been shown, since this is the relevant screening criterion for short-term PCs. No locations within the model domain exceeded 1% of the PM₁₀ air quality objective (i.e., 0.5 µg/m³) and the concentration isopleth levels have been developed to allow visualisation of the plume footprint only.

SO₂ (15-minute mean) contour

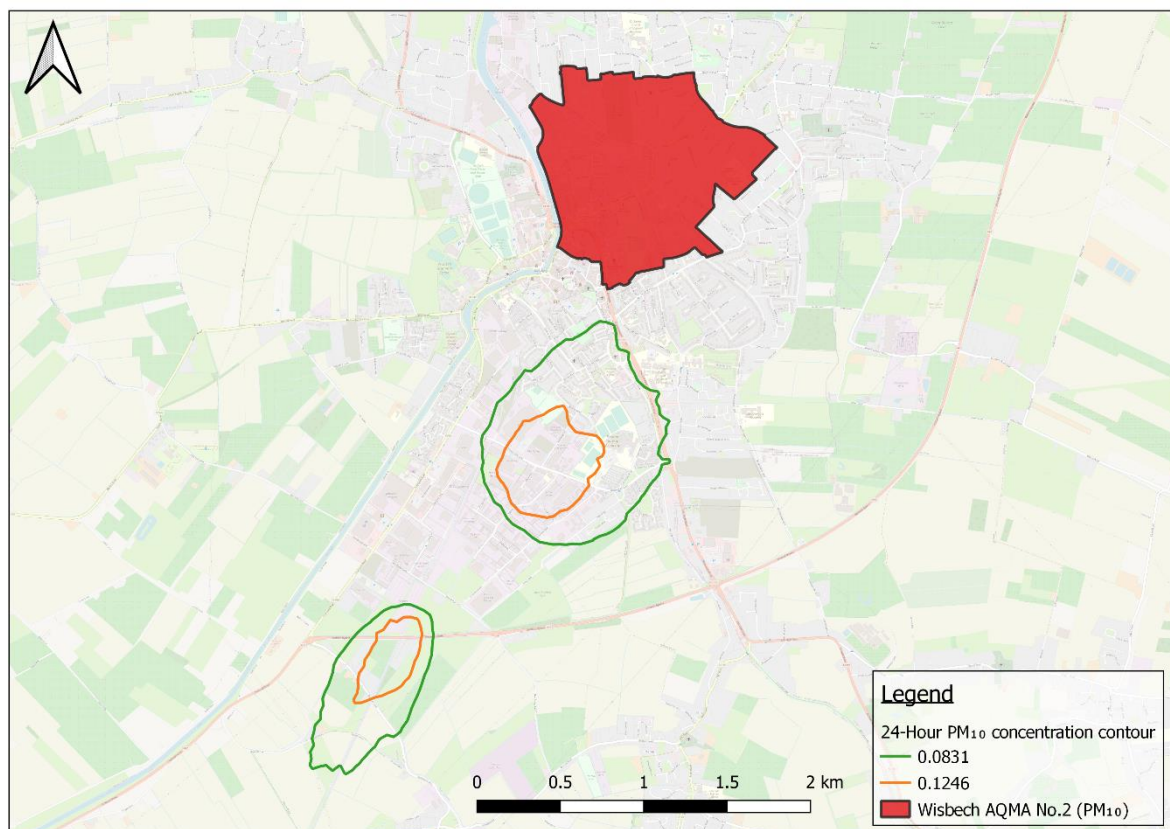


² Wood, 2020. 'Technical Note: Medworth Energy from Waste CHP Facility: Methodology Statement Supporting the Air Quality Assessment'.

NO₂ (annual mean) contour:



PM₁₀ (24-hour mean) contour:



4. Provide a summary of the actual modelled emission concentrations for the abnormal operational scenario, for the following pollutants:

- **Dioxins**
- **Mercury**
- **NO_x**
- **Metals other than mercury**
- **SO₂**
- **HCl**
- **PCBs**

Include the emission concentrations during normal operation as well to demonstrate the factor of increase in the worst-case scenario.

Response: Article 46(6) of IED constrains periods of abnormal operation where emission limit values are exceeded to a period of no more than four hours uninterrupted, up to a cumulative duration of operation in such conditions to no more than 60 hours per year. Consequently, air quality effects associated with abnormal operation are, therefore, limited to short-term impacts i.e., those where the averaging period is one hour or less.

The table below provides the modelled emission concentrations for short-term averaging periods covering normal and abnormal operations. Dioxins have not been included in the abnormal emissions assessment since effects of exposure to dioxins are predominantly long-term and include consideration of annual mean process contributions only.

Pollutant	Normal operation (mg/Nm³)	Abnormal operation (mg/Nm³)	Factor increase
NO _x	400	800	2
Mercury	0.02	0.1	5
Cadmium and thallium	0.02	0.1	5
Antimony and other group 3 metals	0.03	0.15	5
SO ₂	200	250	1.25
HCl	60	1200	20
PCBs	3.87x10 ⁻⁹	3.87x10 ⁻⁸	10

Noise

5. ***Provide a written statement confirming the Operational Noise Impact Assessment (Ref. 41310-WOOD-XX-XX-RP-ON-0006_S0_P01 – NIA) previously provided is representative of the noise emissions arising from on-site operations and therefore for audit by the Environment Agency. Ensure the statement addresses the following points:***

- i. Confirmation that the power level of noise sources modelled in the assessment are unlikely to change or if they are likely to change provide the range of the potential power levels for each relevant noise source.***
- ii. Confirmation that in the event that power levels of noise sources are to change significantly during the final design that the applicant will undertake a revised noise impact assessment and associated modelling.***

Section 4.3.5 of the above referenced document states:

“A full/updated risk assessment of potential noise emissions, accounting for the major plant items and processes, detailing the final noise control measures and consideration of BAT, will be undertaken following completion of the detailed design and plant selection. However, outline control measures and initial BAT assessment has been presented in the permit application. These aspects are discussed in the next section.”

When auditing your assessment, we need to (sic) certain that the identified sound sources and sound power levels are representative of your operation to confirm that any proposed mitigation will be effective.

Response: The paragraph referenced in Section 4.3.5 of the NIA was included to clarify that the EPC contract has not yet been awarded for the EfW CHP Facility and, as such, the detailed design not yet finalised. However, this was not intended to result in inference being drawn that the types, location and potential sound power levels of noise emission sources are unknown and/or subject to potentially significant change.

The plant layout and design parameters of key items of process equipment is included in the Contractual and Technical Specifications that will form the EPC contract. As such, the type of noise generating equipment, its location, height and required performance characteristics etc., are already established and these have been reflected in the NIA.

The statement was included to clarify that preferred vendors of specific items of equipment have not been selected and, as such, it is not possible to provide e.g., data sheets for specific items of equipment with the application. For example, it is not possible, until completion of the detailed design, to confirm whether the supplier of the ID fan will be Supplier X or Supplier Y etc.

The approach to establish sound power levels for the identified noise sources (as previously described, the type and location of the emission sources themselves will not be affected by the detailed design)

was to adopt reasonable worst-case levels based on experience of similar sources and similar facilities. As such, the sound power levels established within the assessment are expected to be conservative.

However, recognising that there remains an element of uncertainty with this approach until final vendor selection is made, a proposal for a pre-operational condition requiring the noise assessment and modelling to be updated post completion of the detailed design has already been made by the Operator in Section 7.1 of the Supplementary Technical Information Report (ref. 12417A-10-R02-01-F01). The purpose of the proposed pre-operational condition was not to allow the introduction of new sources of noise emissions, or substantially change the assessment, but to provide additional comfort to the EA that actual sound power levels and resultant impacts post completion of the detailed design phase would be within those included in the NIA that supported the permit application. For the avoidance of doubt, the Operator is committed to undertaking a revised noise impact assessment and associated modelling after the detailed design phase has completed.

6. Provide more design details for the proposed acoustic barrier intended to reduce the impact of noise emissions at 10 New Bridge Lane, addressing the following aspects:

- i. The dimensions of the attenuation barrier and access gate including details of the height, thickness, density and materials used to construct the barrier/access gate.***
- ii. If an access gate is to be used as part of the attenuation barrier provide information on how this will be sealed when closed to ensure the attenuation barrier is effective.***
- iii. Any mechanism that would be used to ensure the gate is closed when not in use (i.e., automatic closing etc.)***
- iv. Who would be responsible for ensuring the gate is procedurally operated to maintain its effectiveness as a noise attenuation barrier (i.e. not left open/obstructed).***

Provide further clarification regarding the construction and operation of the acoustic fence and its access gate, including details about how any joints and seals around the gate will maintain the level of sound mitigation required, and details about who will have the ability to open the gate and in what circumstances.

Response: The majority of information requested concerning the key physical properties of the acoustic fence and gate are provided with the permit application. Specifically, the Outline Noise Management Plan (ONMP) provided as Appendix A15 to the Supplementary Technical Information Report, includes a drawing at the end of Section 5.4 Noise Management after page 7D21, indicating the length of the fence and gate.

The height of the fence and gate are stated in the drawing as 3 m. The length of the section of fence on the west boundary of the property at 10 New Bridge Lane is approximately 8.5 m. The length of the section of fence on the north boundary of the property at 10 New Bridge Lane is approximately 41 m. The length of the gate indicated in the diagram is approximately 4.5 m.

The thickness, density and material of the fence and gate are matters to be confirmed during detailed design. However, an example construction, provided by a potential supplier has been considered, which consists of wooden panelling on steel supports, with a surface density of 26 kg/m² (in any case a minimum performance of 20 kg/m² will be defined in the specification for the barrier) and a varying thickness of a typical panel with support beams. The electrically-operated gate is proposed to be constructed with the same wooden panelling applied to either a cantilevered or base-track frame.

The gate will fully close to the gate pier, ensuring no vertical gaps are present through which noise could pass. The bottom of the gate would likely be supported by a runner wheel in a recessed track, which would entail either minimal or no gaps at the bottom of the fence. If an appropriate design will allow the bottom of the gate to be located within the recess, then this would form a complex pathway that would reduce noise propagation underneath the gate.

However, calculations indicate that a small gap (in the order of 10 to 20 cm) would not significantly reduce the attenuation provided by the gate. Therefore, whilst the design of the gate will be undertaken to minimise and eliminate gaps wherever possible, a small gap at the bottom of the gate should not confound the acoustic performance. This will be confirmed in detailed design.

The electrically operated gate will be fitted with timed automatic closing and safety sensors. This reduces the potential for the gate being left in a permanently opened state following access to/egress from the property and maintains the acoustic performance of the barrier outside of the limited periods of time when access to/egress from the property is required.

At MVV's current operational sites, there are two 12 hour shift teams and a waste acceptance team covering waste reception hours. Each of these three shifts completes a set of daily rounds in which they check for aspects such as noise, odour and litter. For the EfW CHP Facility, these checks will be extended to include checks for defects on the acoustic barrier and its integrity. These checks would be completed externally, without entry to the property, and the Operator would arrange for completion of any remedial works identified. During the day, the Operator would contact the occupier to inform them of any defects or the gate being open/obstructed, before attempting to close, or clear, any obstruction if necessary. During the night, the Operator would attempt to close or clear any obstruction and then contact the occupier the next day.

Access to the barrier and gate, and the provision to maintain it (and remove any obstruction) for the operational lifetime of the installation, is secured in Schedule 8 of the draft DCO Rev 6, Volume 3.1.

The Operator proposes that the final design for the barrier and gate is provided to the EA by way of a pre-operational condition, either as part of the proposed pre-operational noise impact assessment/management plan revision described in the response to Question 5 above, or as a specific pre-operational condition.

Odour

7. Provide a revised copy of your Outline Odour Management Plan (OMP) (Ref. OS.HSE.XX.XX.S01.MH) that includes the following information:

i. Review and update the sensitivity of receptors in Table 2.1.

Sensitivity to odour is noted as High for residential use, however the majority of residential receptors are listed as low or medium sensitivity.

ii. Provide details of the escalation procedure where hauliers arrive to site with loads improperly sheeted, or vehicles that are particularly odorous.

iii. Details the steps taken by the operator to identify particularly odorous loads delivered to site that will result in either preferential submission to the combustion process or rejection of waste.

iv. Detail the waste arrival, acceptance and tipping procedure for a vehicle. Include the expected/maximum wait times, all locations which will be used for waiting vehicles, the number of tipping bays, and the maximum number of vehicles that can be waiting on site at any time.

v. Propose alternative measures for odour control which will provide an appropriate level of environmental protection when both lines are not operating.

Odour neutralisation sprays are proposed as the only mitigation for odour when both lines are shutdown for a period less than seven days. This alone is not considered BAT for the site.

vi. Detail the steps taken to minimise waste stored on site during shutdown of both incineration lines. Include information on triggers for diverting waste and when/if waste would be removed from site.

BAT 21 requires minimisation of waste in storage to control odour risk during complete shutdown periods.

vii. Confirm what would trigger the Environment Agency to be notified of an odour complaint.

viii. Consider equipment breakdown with the Table 6.1 recovery steps for abnormal operation.

Response: An updated outline OMP accompanies this response. For convenience, a clean version and version with track changes has been provided. For reference, the specific points raised are addressed in the following sections:

- i. All residential receptors have now been updated to high sensitivity receptors.
- ii. Section 3.1 in the OMP has been updated with these details, with a further amendment to Table 4.1.
- iii. Section 3.1 in the OMP has been updated with these details.
- iv. Section 3.1 in the OMP has been updated with these details.
- v. Section 3.3 and Table 4.1 in the OMP has been updated with these details. During a simultaneous shutdown of both lines of any length, the shutdown fan, which extracts potentially odorous air from the bunker and tipping hall through dust and carbon filters, will be operated. Odour neutralisation sprays are no longer proposed.
- vi. Section 3.3 in the OMP has been updated with these details.
- vii. Section 5.1 in the OMP has been updated with these details.
- viii. Table 6.1 in the OMP has been updated with these details.

Fire Prevention Plan

8. Provide a revised copy of your Outline Fire Prevention Plan (FPP) (Ref. BS.BC.XX.XX.SXX.MH) that includes the following information:

- i. Site, drainage and sensitive receptor plans must be included within the standalone document, to aid usability of the plan on site.*
- ii. Provide a revised site plan which includes the location of nearby hydrants and water supplies.*
- iii. Provide details of how regularly the site will be inspected and cleaned to prevent the build-up of loose combustible waste, dust and fluff.*
- iv. Provide site specific calculations to justify the amount of water stored on site for firefighting. Where exact calculations are not possible before final design use maximum / minimum figures to indicate how a worst-case scenario has been considered.*

The Fire Prevention Plan states that the fire water tank will be designed to provide 2 hours supply of water but does not confirm that a fire would be expected to be extinguished within 2 hours, or whether other firewater supplies are located suitably close to the site as an alternative supply.

- v. Provide details of how incoming wastes will be delivered to alternative sites during a fire, and until the site is operational following a fire.*

Response: As stated in Section 1 of the FPP, the FPP provided with the permit application is produced as an outline plan only at this stage, detailing the intended provisions to be incorporated into the final, detailed design of the EfW CHP Facility. The plan will be reviewed and, where necessary, updated following completion of the detailed design stage. The Operator proposes that an updated version of the FPP post completion of the detailed design is made available to the EA by way of pre-operational condition. We understand this procedure has been accepted on other similar facilities where a permit application had to be made prior to completion of detailed design to allow twin-tracking with a DCO application (e.g., permit reference EPR/LB3301HL).

Notwithstanding the above, the outline FPP has been updated to reflect the questions in the Schedule 5 notice and the updated FPP accompanies this response. For convenience, a clean version and version with track changes has been provided. For reference, the specific points raised are addressed in the following sections:

- i. Site, drainage and receptor plans now form an appendix to the FPP. These plans will be updated, if required, in the final working document in as-built form following completion of detail design and construction of the EfW CHP Facility.
- ii. Section 11.1 in the FPP has been updated to reference that the number and exact location of the fire hydrants will be determined during detailed design. The site plan will then be updated accordingly to indicate the location of the hydrants.
- iii. Section 5.1.2 in the FPP has been updated with these details.
- iv. Section 13.1 in the FPP has been updated to provide the site-specific calculation of the required volume of firefighting water for a 2 hour fire and confirms the firewater tank is sufficient for this purpose. The Operator has proposed a series of alternative measures which will allow fires to be extinguished within a 2 hour period; these measures are described in more detail in Section 11 and 13.1 in the FPP and are comparable to the alternative measures described in case study 3 of the Environment Agency's "*Case study examples of alternative measures*".³
- v. Section 15.1 in the FPP has been updated with these details.

Waste codes

9. ***European Waste Catalogue (EWC) codes provided in the table below do not match descriptions outlined within Technical Guidance WM3: Waste Classification – Guidance on the classification and assessment of waste. Update the table below with the correct waste code and/or description.***

³ <https://www.gov.uk/government/publications/fire-prevention-plans-environmental-permits/fire-prevention-plans-case-study-examples-of-alternative-measures>

Waste code	Description
20	Municipal Waste (Household Waste and Similar Commercial, Industrial and Institutional Wastes) including Separately Collected Fractions
20 03	<i>Other municipal wastes</i>
20 03 03	Street sweeping residues
20 03 04	Street cleaning residues

Response: The waste types included within the application reflect the same table included within the permit for the Operator's other facility in Devonport. Upon further review, it is apparent there is a transposition error in the table of waste codes in the Devonport permit.

The description for 20 03 03 in Table 4-1 of the Supplementary Technical Information Report (ref. 12417A-10-R02-01-F01) should read "street-cleaning residues" and this waste type will be accepted at the EfW CHP Facility. 20 03 04 should read "septic tank sludge" and this waste type will **not** be accepted at the EfW CHP Facility.

10. Wastes indicated in the table below have very little or no calorific value. Provide reasoning as to why each EWC code has been proposed and is considered suitable for this incineration activity.

Waste code	Description
15	Waste Packaging, Absorbents, Wiping Cloths, Filter Materials and Protective Clothing not Otherwise Specified
15 01	<i>Packaging (including separately collected municipal packaging waste)</i>
15 01 04	Metallic packaging
15 01 07	Glass packaging
19	Wastes from Waste Management Facilities, Off-site Wastewater Treatment Plants and Preparation of Water Intended for Human Consumption and Water for Industrial use
19 04	<i>Vitrified waste and wastes from vitrification</i>
19 04 01	Vitrified waste
19 12	<i>Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified</i>
19 12 02	Ferrous metal
19 12 03	Non-ferrous metal

Waste code	Description
19 12 09	Minerals (for example sand, stones)

Response: The list of EWC codes within Table 4-1 of the Supplementary Technical Information Report (ref. 12417A-10-R02-01-F01) reflects the same waste codes included in the permit for the Operator's other facility in Devonport and reflects specific contractual requirements for that facility. The Operator has reviewed the list of waste codes and confirms it has no intention to accept the list of waste codes described above at the EfW CHP Facility. Consequently, all EWC codes described above can be withdrawn from the list of waste types described in the application.

11. Wastes proposed in the table below may have very high moisture content and low calorific value. For each EWC code, provide the following:

- i. Justification for the suitability of the waste for incineration.*
- ii. The type of waste which will be accepted under the code.*
- iii. Confirmation of whether the waste is a solid / liquid / sludge*

Waste code	Description
02	Wastes from Agriculture, Horticulture, Aquaculture, Forestry, Hunting & Fishing, Food Preparation & Processing
<i>02 02</i>	<i>Wastes from the preparation and processing of meat, fish and other foods of animal origin</i>
02 02 02	Animal-tissue waste
02 02 03	Materials unsuitable for consumption or processing
<i>02 07</i>	<i>Wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)</i>
02 07 02	Wastes from spirits distillation
20	Municipal Waste (Household Waste and Similar Commercial, Industrial and Institutional Wastes) including Separately Collected Fractions
<i>20 01</i>	<i>Separately collected fractions</i>
20 01 08	Biodegradable food waste
<i>20 02</i>	<i>Garden and park wastes (including cemetery wastes)</i>
20 02 01	Biodegradable waste

Response: These waste types would only represent a small fraction of the predominant waste types accepted at the installation. The EfW CHP Facility is designed to operate with a CV ranging from 8 – 14 MJ/kg. Based on MVV's operational experience at its other facilities, smaller quantities of waste outside this range are also suitable (and, indeed, can sometimes be desirable as a means of controlling the CV of mixed waste within the bunker) as, once mixed within the waste bunker, the homogenised waste falls within this range and there is no detrimental effect to process operation, combustion efficiency or achievement of emission limit values.

The table below provides more information on each waste type.

Waste code	Description	Nature (solid / liquid / sludge)
02 02 02	Animal by-product contaminated waste from local authorities	Solid or sludge
02 02 03	Animal by-product / International Catering Waste (ICW) contaminated waste from local authorities	Solid or sludge
02 07 02	Waste from local breweries / distilleries e.g. spent grains, hops and filter sheets and cloths, yeast and yeast like residues, sludge from production processes or malt husks, malt sprouts, yeasts and yeast-like residues.	Solid or sludge
20 01 08	International Catering Waste (ICW) contaminated waste from local authorities	Solid or sludge
20 02 01	Parks / cemetery / contaminated waste from local authorities	Solid or sludge

Risk Assessment

12. Revise your risk assessment so that language is Specific, Measurable, Relevant, Achievable and Time-Restricted (SMART).

The risk assessment includes statements such as "All tanks, equipment and hardstanding are subject to regular inspection and maintenance programme." This statement is vague and cannot be regulated against.

Response: As confirmed in separate communication with the EA, an update to the risk assessment is not required. Maintenance and inspection procedures will be updated after detailed design and will be provided to the EA as part of a pre-operational condition.

13. Provide a revised risk assessment which includes the risk of pests and litter, detailing measures in place to manage and minimise the risk.

Response: Management of pests will be controlled by operational procedure OS.HSE.02.03.DT. Although this procedure has been developed specifically for the Operator's facility at Devonport, it is applicable to all sites operated by MVV (Medworth CHP Limited is a MVV subsidiary) with minor site-specific modification to reflect permit reference numbers and permit conditions. The procedure will be updated to make it specific to the EfW CHP Facility and shared with the EA as part of the proposed pre-operational condition to provide a summary of updated IMS procedures prior to commissioning.

The main control measures for pests and litter include:

- All waste delivered to the EfW CHP Facility will arrive in enclosed or sheeted/covered RCVs or walking floor articulated lorries.
- There will be no external storage of waste. All waste will be stored within the bunker in the enclosed tipping hall.
- Daily inspections of the installation and boundary will be performed by each shift team and any litter identified removed immediately.
- Strict housekeeping and good working practices are incorporated into the IMS to ensure site cleanliness.
- Competent pest control contractors will routinely visit site every 5 – 6 weeks. These visits will monitor for the presence of rodents and pest insects, topping up bait stations or applying treatments as required. Dependent on the findings of the previous survey, the frequency of these visits can be increased accordingly.
- Where required, particularly during periods of warm weather, operational staff will treat the waste bunker on a weekly basis using an insecticide misting system.

With these control measures in place, the potential risks associated with pests and litter is considered to be low.

Sewer Emissions

14. Update and return Form B6, completing questions 7 and 8e

The application states that process emissions to sewer will be infrequent and only during periods of maintenance on the ion exchange unit. We require confirmation through the B6 form questions that no harmful or specific substances will be released, which could have potential short-term impacts. If such substances are present, the impact should be screened using the H1 tool.

Response: As discussed with the permitting officer, there appears to have been an IT issue when Form B6 was saved to the EA's servers. The version of Form B6 sent to the EA on 23/03/23 is a full response, with questions 7 and 8e completed as relevant. This form has been attached to the Schedule 5 response for reference.

For clarity, questions 7 and 8e confirm no harmful or specific substances will be present in the discharge and, hence, no requirement for a H1 assessment.

Chemical Bunding

15. Provide a written description of the bunding for chemicals used in the water treatment plant, demonstrating this meets the requirements of CIRIA C736: Containment systems for the prevention of pollution.

The application indicates that walls will provide secondary containment for the water treatment chemicals (hydrochloric acid, sodium hydroxide) but does not confirm the doors are raised to provide sufficient containment capacity.

Response: Whilst the building walls are considered to provide some additional level of containment, the main secondary containment measure for chemicals used in the water treatment plant is that such chemicals will be stored in appropriately designed (for the specific substance being stored) integrally banded storage tanks providing a minimum secondary containment capacity of 110% of the tank volume, as required by CIRIA C736.