(Planning Application No: A/H3/449)

# **RESPONSE-TO-COMMENT TABLE**

Comments	Response
<u>Comments from Environmental Protection Department:</u> (Contact Person: Mr Kelvin CHOI; Tel: 2835 1594)	
Comments received on 10 September 2024 Air Quality	
1. Section 1.4.6. Suggest to replace "or" by "and" in Line 2 and remove the last sentence.	S1.4.6 has been revised accordingly.
2. Section 4.1.1. Suggest to remove "emissions from the" in Line 3-4	S4.1.1 has been revised accordingly.
<ul> <li>3. Section 4.4.3</li> <li>- (Line 4). Please supplement the date of site survey</li> </ul>	Section 4.4.3 has been updated accordingly.
- (R-t-c 4 (a) ). Please clarify whether "the construction works of those construction sites have been largely completed" is an expectation or observed during the site survey.	The said statement was prepared based on the observation during site survey.
- Suggest to revise "fugitive emission" in 2nd to 3rd last line to "fugitive dust and gaseous emissions".	S4.4.3 has been revised accordingly.
- Suggest to supplement "with implementation of control measures and good site practice, adverse cumulative construction air quality impact is not anticipated" if the scale of all identified concurrent construction projects are small in size.	S4.4.3 has been revised.
<ol> <li>Section 4.4.4. Suggest to revise "fugitive dust emission" in line 1 to "fugitive dust and gaseous emissions" and "construction dust" in line 8 to "construction air quality impact".</li> </ol>	S4.4.4 has been revised accordingly.

Comments	Response
<ol> <li>Section 4.4.4 (2nd bullet point). It is recommended that exempted NRMMs shall not be used.</li> </ol>	Section 4.4.4 has been revised accordingly.
<ul><li>6. Section 4.6.1. Suggest adding "than" after "higher" in Line 3</li><li>7. Section 4.6.3</li></ul>	S4.6.1 has been revised accordingly.
- Suggest to revise the first sentence as: Within 4km from the boundary of the Application Site	S4.6.3 has been revised accordingly.
- Suggest to replace "marine" by "cruise" in Line 2 8. Section 4.6.7	S4.6.3 has been revised accordingly.
- "The emission points of the fire boats while they are hotelling at the Central Government Pier and the manoeuvring of fire boats are out of the 500m Assessment Area" in Line 4-6 does not tally with "the marine activities are within the 500m Assessment Area " in Line 2. Please clarify and revise for consistency.	The statement of "The emission points of the fire boats at Central Government Pier while they are hoteling at the pier and the manoeuvring of fire boats are out of the 500m Assessment Area" is correct. Section 4.6.7 has been revised accordingly.
<ul> <li>Suggest adding "types of" before "existing marine activities " in Line 2</li> <li>Section 4 (12)</li> </ul>	As S4.6.7 has been revised, this comment is considered not applicable.
<ul> <li>9. Section 4.6.12</li> <li>Suggest to replace "was found to be" by "would represent" in Line 5</li> </ul>	S4.6.12 has been revised accordingly.
<ul> <li>(Line 5-8 and R-t-c 7). Please supplement the response as a footnote in Section 4.6.12: "Due to COVID-19, the number of cross boundary ferries in Year 2020 to 2023 are very low. Therefore, the data in 2021 to 2023 Port of Hong Kong Statistical Tables is not considered representative. Data in 2018, 2019, and 2020 Port of Hong Statistical Tables is referred to."</li> </ul>	S4.6.12 has been revised accordingly.
- Suggest to revise Line 8-10 as: Therefore, the above information is adopted for the calculation of emission rate	S4.6.12 has been revised accordingly.
- Suggest to replace "ferry" by "ferries" in Line 11, 12, 15, 17, 19, 20	S4.6.12 has been revised accordingly.

Comments	Response
- Suggest adding "is four according to the information of departure presented in Appendix 4-2" after "based on the maximum number of fast ferries departed for each hour" in Line 20	S4.6.12 has been revised accordingly.
- Please state clearly in the section that the emissions from the arrival ferries have been included in the assessment and how they are determined.	The whole traveling routes of the ferries include the arrival ferries and departure ferries.
10. Section 4.6.13. Suggest to replace "a" by "the" in Line 14.	Section 4.6.13 has been revised accordingly.
11. Section 4.6.15	
- Suggest to replace "relatively far " by "some distance away" in Line 7	S4.6.15 has been revised accordingly.
- Suggest to remove "from" in Line 11	S4.6.15 has been revised accordingly.
- Suggest to replace "served for " by "serve" in Line 14	S4.6.15 has been revised accordingly.
- Suggest to replace "connected with " by "connected to " in Line 16	S4.6.15 has been revised accordingly.
12. Section 4.6.16	
- Suggest to supplement a map of the three PTIs in the Figures	The map of the three PTIs has been supplemented in Fig 4.5.
- Please clarify whether emission information or traffic information were provided by traffic consultant in Line 5	The traffic information was provided by traffic consultant.
- For consistency, please clarify whether Central (Rumsey Street) Terminus in Appendix 4.6 and Man Kit Street Bus Terminus refer to the same Terminus and revise the names.	The Man Kit Street Bus Terminus has been used in the report for consistency.
13. Section 4.6.17. Suggest adding "to the proposed development" after	S4.6.17 has been revised accordingly.

Comments	Response
"from PTIs " in Line 6	
14. Section 4.6.23. Please clarify <u>which</u> minimum quarterly temperatures and relative humidity (RH) data are adopted (e.g. for the PTI located at the concerned grid). Same clarification shall be applied to Section 4.7.14 to clarify which grid is used for the daily met data profile (e.g. the road links within the same grid are using the same set of daily profile, etc.).	Clarification for the adopted temperature and RH data has been supplemented accordingly.
15. Section 4.7.1. Suggest to replace "of" by "for" in Line 2	S4.7.1 has been revised accordingly.
16. Section 4.7.4. Suggest adding "to" after "referred" in Line 2	S4.7.4 has been revised accordingly.
17. Section 4.7.5. Suggest adding "of" after "Three sets" in Line 1	S4.7.5 has been revised accordingly.
18. Section 4.7.19. Suggest to check if the last sentence should be revised as: "for every month <u>and hour of a year</u> " to be tallied with Section 4.7.14. Suggest to elaborate the exact meaning of "maximum running exhaust fleet average emission factor (g/km) arising from all combinations of minimum temperature and relative humidity" and clarify what is the maximum running emission factor.	S4.7.19 has been revised accordingly.
19. Section 4.7.30 - Typo: 4.8.64.8.5	S4.7.30 has been revised accordingly.
- Please check if the second sentence should be "the height of the road surface above ground (in mAG) should be added to the base elevation to calculate the release height in mPD".	S4.7.30 has been revised accordingly.

Comments	Response
20. Section 4.7.31. Suggest to remove the 4-th sentence.	S4.7.31 has been revised accordingly.
21. Section 4.8.1. Suggest to replace "combined" by "added" in Line 3	S4.8.1 has been revised accordingly.
22. Section 4.8.2. Suggest adding "and NOx" after "NO2" in Line 3	S4.8.2 has been revised accordingly.
23. Section 4.9.1. Suggest adding "cumulative" before "air pollutant concentrations " in Line 1, and remove "separately " in Line 3	S4.9.1 has been revised accordingly.
24. Section 4.9.2. Contour plots at G/F of the Application Site (assessment height: 13.9 mPD) do not tally with Contour plots at 1.5 m above ground (15.4 mPD) in Appendix 4-19. Please revise to be consistent	S4.9.2 has been revised accordingly.
<ul> <li>25. Section 4.9.7, 4.11.2, 5.1.5</li> <li>(Line 5-6). Please list out the assumptions of worst-case scenario adopted for most of the emission sources to confirm that the statement is correct</li> </ul>	Sections 4.9.7, 4.11.2 and 5.1.5 have been revised accordingly.
- (Line 7). It is unclear that the AQOs would be complied with for any minor adjustment in assumptions. Please remove "any minor adjustment in assumptions " in Line 7 to avoid confusion	Sections 4.9.7, 4.11.2 and 5.1.5 have been revised accordingly.
- (Line 7). For minor adjustment in floor height, please justify why the AQOs would still be complied with for minor adjustment in floor height (e.g. based on results at various levels in Appendix 4-18, and all emission sources are below the assessment height 119.9 mPD, etc.) and supplement in the paragraph. On the other hand, if some of the emission sources are higher than the assessment height of 119.9 mPD, then it is	The statement is considered valid as the predicted results of ASRs from 13.9mpD to 119.9mPD are well below the criteria of AQOs (shown in Appendix 4-18) and no identified emission source is higher than 119.9mPD.

Comments	Response
unclear that the AQOs would still be complied with without further assessment.	
26. Section 4.10.1 and 4.11.1. Suggest adding "as odour emission source" after "has been identified " in Line 1. Please specify the date(s) of site survey.	S4.10.1 and S4.11.1 have been revised.
27. Figure 4.4 and R-t-C #8. The arrival route has not been shown in the figure as stated in R-t-C#8. Please clarify if there are any arrival routes lie within 500m assessment area and revise Section 4.6.12 accordingly. Otherwise, it is necessary to include the arrival routes as emission sources.	Each travelling route has included the arrival and departure of the fast ferries by referring to the approved EIA report for Expansion of Heliport Facilities at Macau Ferry Terminal (Register No. AEIAR-095/2006). Section 4.6.12 has been revised to explain this.
<ul> <li>28. Appendix 4-2 <ul> <li>Please attach a copy of the screenshot / relevant data downloaded from the Marine Department's Website in the Appendix for future reference.</li> </ul> </li> </ul>	The relevant data could be accessed and downloaded from data.gov.hk.
- Please supplement that the data are for year 2023.	The relevant data has been supplemented in Appendix 4-2.
<ul><li>29. Appendix 4-3</li><li>Suggest to replace "ferry" by "ferries" in Footnote [1]</li></ul>	Footnote [1] has been revised accordingly.
- Suggest to delete "from the terminal" in Footnote [1]	Footnote [1] has been revised accordingly.
- Please supplement that the emission rates are calculated in Appendix 4-8	Footnote [4] has been supplemented in Appendix 4-3.
- For M36 to M106, the NO <sub>2</sub> emission rates should not be higher than the NO emission rates, please check whether the two	The NO <sub>2</sub> and NO emission rates have been revised accordingly.

Comments	Response
Columns have been interchanged and rectify	
<ul> <li>For M36 to M106, please supplement that the reference for dividing the maneuvering emission rates of NOx, NO2, NO, RSP, FSP, SO2 in Appendix 4-8 f by the number 63. Furthermore, the manoeuvering emissions in Appendix 4-8 for Route 1 is adopted in the calculation of emission rates in Appendix 4-3 but the manoeuvering emissions in Appendix 4-8 for Route 2 is not used. Please elaborate for clarify.</li> </ul>	'63' is the number of sources along Travelling Route 1. For Travelling Route 2, the number of sources is 66. The number of sources for each route has made reference to the approved EIA report for Expansion of Heliport Facilities at Macau Ferry Terminal. Note in Appendix 4-3 has been updated accordingly.
<ul> <li>30. Appendix 4-8 <ul> <li>Suggest adding "as a conservative approach" at the end of Footnote [1] under the Idling Emissions Table</li> </ul> </li> </ul>	Footnote [i] has been revised accordingly.
- Suggest to replace "ferry" by "ferries" in Footnote [1] under the Cruising Emissions Table	As Footnote [1] has been revised, this comment is considered not applicable.
- Suggest to revise as " ( <u>ferries</u> would be arriving to the terminal from west of the terminal and departing <u>from east</u> of the terminal)" in Footnote [2] under the Cruising Emissions Table	Noted. Footnote [2] has been revised accordingly.
- Suggest to supplement if it is conservative to use the cruising mode for calculation of emission rates.	The assumption of "Slow Cruise" should be more conservative. The calculation of the emission rates have been revised by using the loading factor and travelling time of "Slow Cruise". However, with the revised emission rates of the ferries for the air models, the effect on the predicted cumulative results is minor.
- Suggest to elaborate the assumption on 1 ferry to be idling at each hour and at each berth for both daytime and nighttime.	According to the ferry schedule, the maximum frequency (ferries/hr) for Berth No. 1 to Berth No.4 is 4. Therefore, 1 ferry to be idling at each hour and at each berth for both daytime and nighttime is assumed (i.e. 4

Co	omments	Response
		ferries are in idling mode at each hour), which is considered as a conservative approach. Remark (i) in Appendix 4-8 has been revised accordingly.
31	Appendix 4-10. Suggest to remove "and the amount of the emission of SO2 would not be underestimated" in Footnote (j)	Appendix 4-10 has been revised accordingly.
32	. Suggest to add a map to show the road links with and without start emissions.	The map for the road links with and without start emissions have been shown in Appendix 4.13.
E	nfac Modelling	
	Please supplement the SAMP input templates and output summary files (including the templates for sensitivity test years).	The SAMP input templates, and output summary files have been provided for checking.
2.	For information, SAMP v2.0 has been released on 31 July 2024 and the assumptions on the use of temperature and Relative Humidity of PATH grid have been updated for road segments that span three or more grids or in coastal areas spanning two or more grids. Consultant may review the segmentation of the road segments and consider whether recalculation of the emission rates using SAMP v2.0 would be applicable.	After reviewing the segmentation of the road segments, the road segments in this project are not spanning three or more girds or in coastal areas, therefore, there would have no differences for the assumptions on the use of temperature and RH for the road segments. Therefore, recalculation of the emission rates using SAMP v2.0 is considered unnecessary.
3.	Section 4.7.14, please clarify whether the minimum quarterly temperature and Relative Humidity among the covered PATH grids (i.e. 37_29, 38_29, 38_30) have been used for the portal and PTI emission calculations.	S4.7.14 has been revised accordingly.
4.	Appendix 4-12, please supplement the temperature and Relative Humidity used in the calculation of composite Emission Factors.	Appendix 4-12 has been revised.

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C	omments	Response
5.	Appendix 4-13 and 4-14 are misplaced in other chapters/ folders. Please rectify for integrity.	The relevant sections have been reordered accordingly.
6.	Suggest to overlay the concerned PATH grids and label the grids in the road link map.	The revised road link map can be found in Appendix 4-13.

## Consolidated by: **KTA Planning Limited** Date: **12 September 2024**

## List of Appendices

Appendix 1 Revised Environment Assessment