Table C1 Implementation Schedule of Recommended Mitigation Measures - Air Quality

EIA Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures			What requirements or standards for the measures to achieve?
				D	С	0	
Construction	Phase (Non Designated Project Element)						
S.3.5.5	Appropriate dust control measures should be implemented during the construction stage in accordance with the requirements in the Air Pollution Control (Construction Dust) Regulation. Dust control techniques should be considered to control dust to a level not exceeding the AQOs as well as the 1-hour TSP guideline level of 500 µg/m³. These measures include, but are not limited to, the following: Adoption of good site practices; Avoid practices likely to raise dust level; Frequent cleaning and damping down of stockpiles and dusty areas of the site; Covering the exposed areas with tarpaulin; Reducing drop height during material handling; Regular plant maintenance to minimize exhaust emission; and Sweep up dust and debris at the end of each shift.	Air Quality (fugitive dust) Control during Construction Phase	Contractors		٧		Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation



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S.3.5.7 ~ S.3.5.8	Given each section of the works would be small scale, localised, and short-term, it would not be useful to perform dust dispersion modelling for this type of transient dust generation activities. Dust suppression and control measures stipulated in the Air Pollution Control (Construction Dust) Regulation would be applied. These measures include, but are not limited to, the following: Adoption of good site practices; Avoid practices likely to raise dust level; Frequent cleaning and damping down of stockpiles and dusty areas of the site; Covering the exposed areas with tarpaulin; Reducing drop height during material handling; Regular plant maintenance to minimize exhaust emission; and Sweep up dust and debris at the end of each shift.	Air Quality (fugitive dust) Control during Construction Phase	Contractors		EIA, Air Pollution Control (Construction Dust) Regulation
S.3.9.4	Based on the current design, the odour emissions from the temporary sewage treatment facilities would be ventilated to a deodourizing unit. The deodourizing unit is designed to be able to achieve an odour removal efficiency of 97%.	Odour control during operation phase	DSD and Operators	٧	EIA
S.3.10.1	For the construction activities under the Project, the suitable requirements stipulated in the Air Pollution Control (Construction Dust) Regulation shall be implemented during the construction activities to minimize the dust impact. It is recommended that typical dust control methods including the following good site practices should also be incorporated during construction phase:	Air Quality (fugitive dust) Control during Construction Phase	Contractors	V	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation
S.3.10.1	Watering every hour on unpaved areas and stockpiles of dusty materials (if no tarpaulin is provided) to reduce dust emissions by 90% (e.g. watering intensity at 1.5 litre/m² during the first hour, subsequent application at 0.1 litre/m². Actual application shall depend on the site condition and weather conditions)	Air Quality (fugitive dust) Control during Construction Phase	Contractors	V	EIA, Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation
S.3.10.1	Use of regular watering, with complete coverage, to reduce dust emissions from exposed site surfaces	Air Quality (fugitive dust) Control during Construction Phase	Contractors	V	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation
S.3.10.1	Use of frequent watering for particularly dusty construction areas and areas close to ASRs	Air Quality (fugitive dust) Control during Construction Phase	Contractors	V	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation
S.3.10.1	Vehicle washing facilities should be provided at every vehicle exit point	Air Quality (fugitive dust) Control during Construction Phase	Contractors	V	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation



S.3.10.1	Where a site boundary adjoins a road, streets or other areas accessible to the public, hoarding of not less than 2.4 m high from ground level should be provided along the entire length except for a site entrance or exit	Air Quality (fugitive dust) Control during Construction Phase	Contractors	√	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation
S.3.10.1	Stockpiles of imported material kept on site shall be contained within hoarding, dampened and/or covered during dry and windy weather	Air Quality (fugitive dust) Control during Construction Phase	Contractors	V	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation
S.3.10.1	Material stockpiled alongside trenches should be covered with tarpaulins	Air Quality (fugitive dust) Control during Construction Phase	Contractors	V	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation
S.3.10.1	Open stockpiles shall be avoided or covered. Where possible, prevent placing dusty material storage piles near ASRs	Air Quality (fugitive dust) Control during Construction Phase	Contractors	V	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation
S.3.10.1	Any excavated or stockpile of dusty material should be covered entirely by impervious sheeting or spayed with water to maintain the entire surface wet during the non-working hours	Air Quality (fugitive dust) Control during Construction Phase	Contractors	V	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation
S.3.10.1	All dusty materials shall be sprayed with water prior to any loading, unloading or transfer operation so as to keep the dusty materials wet	Air Quality (fugitive dust) Control during Construction Phase	Contractors	V	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation
S.3.10.1	Water sprays shall be used during the delivery and handling of sands aggregates and the like	Air Quality (fugitive dust) Control during Construction Phase	Contractors	V	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation
S.3.10.1	All demolished items that may emit dust particles should be covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides within a day of demolition	Air Quality (fugitive dust) Control during Construction Phase	Contractors	V	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation



S.3.5.7 ~ S.3.5.8	Given each section of the works would be small scale, localised, and short-term, it would not be useful to perform dust dispersion	Air Quality (fugitive dust) Control during	Contractors	√	EIA, Air Pollution Control (Construction Dust)
	modelling for this type of transient dust generation activities. Dust suppression and control measures stipulated in the Air Pollution Control (Construction Dust) Regulation would be applied.	Construction Phase			Regulation
	These measures include, but are not limited to, the following: Adoption of good site practices; Avoid practices likely to raise dust level;				
	Frequent cleaning and damping down of stockpiles and dusty areas of the site;				
	Covering the exposed areas with tarpaulin; Reducing drop height during material handling; Regular plant maintenance to minimize exhaust emission; and Sweep up dust and debris at the end of each shift.				
S.3.10.1	For the construction activities under the Project, the suitable requirements stipulated in the Air Pollution Control (Construction Dust) Regulation shall be implemented during the construction activities to minimize the dust impact. It is recommended that typical dust control methods including the following good site practices should also be incorporated during construction phase:	Air Quality (fugitive dust) Control during Construction Phase	Contractors		Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation
S.3.10.1*	Watering every hour on unpaved areas and stockpiles of dusty materials (if no tarpaulin is provided) to reduce dust emissions by 90% (e.g. watering intensity at 1.5 litre/m² during the first hour, subsequent application at 0.1 litre/m². Actual application shall depend on the site condition and weather conditions)	Air Quality (fugitive dust) Control during Construction Phase	Contractors	٧	EIA, Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation
S.3.10.1	Use of regular watering, with complete coverage, to reduce dust emissions from exposed site surfaces	Air Quality (fugitive dust) Control during Construction Phase	Contractors	V	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation
S.3.10.1	Use of frequent watering for particularly dusty construction areas and areas close to ASRs	Air Quality (fugitive dust) Control during Construction Phase	Contractors	V	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation
S.3.10.1	Vehicle washing facilities should be provided at every vehicle exit point	Air Quality (fugitive dust) Control during Construction Phase	Contractors	V	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation



S.3.10.1	Where a site boundary adjoins a road, streets or other areas accessible to the public, hoarding of not less than 2.4 m high from ground level should be provided along the entire length except for a site entrance or exit	Air Quality (fugitive dust) Control during Construction Phase	Contractors	1	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation
S.3.10.1	Stockpiles of imported material kept on site shall be contained within hoarding, dampened and/or covered during dry and windy weather	Air Quality (fugitive dust) Control during Construction Phase	Contractors	V	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation
S.3.10.1	Material stockpiled alongside trenches should be covered with tarpaulins	Air Quality (fugitive dust) Control during Construction Phase	Contractors	V	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation
S.3.10.1	Open stockpiles shall be avoided or covered. Where possible, prevent placing dusty material storage piles near ASRs	Air Quality (fugitive dust) Control during Construction Phase	Contractors	V	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation
S.3.10.1	Any excavated or stockpile of dusty material should be covered entirely by impervious sheeting or spayed with water to maintain the entire surface wet during the non-working hours	Air Quality (fugitive dust) Control during Construction Phase	Contractors	V	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation
S.3.10.1	All dusty materials shall be sprayed with water prior to any loading, unloading or transfer operation so as to keep the dusty materials wet	Air Quality (fugitive dust) Control during Construction Phase	Contractors	V	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation
S.3.10.1	Water sprays shall be used during the delivery and handling of sands aggregates and the like	Air Quality (fugitive dust) Control during Construction Phase	Contractors	V	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation
S.3.10.1	All demolished items that may emit dust particles should be covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides within a day of demolition	Air Quality (fugitive dust) Control during Construction Phase	Contractors	V	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation



Operational	Operational Phase (Non Designated Project Element)							
S.3.10.2	The enclosure provided for the odour sources of the upgraded Tai O STW and new Hang Mei SPS and Fan Kwai Tong SPS and the installation of deodorization units with 97% odour removal efficiency will reduce the potential odour impacts. Odour impacts after the upgrading works will be significantly reduced. The current design information of deodourizing units is summarized in Table 3.9 of EIA.	Odour control during operation phase	DSD and Operators	V	√	V	EIA	
S.3.10.3	In addition, good housekeeping practices listed below should be followed to control odour emissions from the plant and these standard practices should be included in the plant operator manual: Screens should be cleaned regularly to remove accumulated organic debris; Grit and screening transfer systems should be flushed regularly with water to remove organic debris and grit; Grit and screened materials should be transferred to closed containers to minimize odour escape; Sludge should be frequently withdrawn from tanks to prevent the production of gases; Sludge should be transferred to closed containers; and Sludge containers should be flushed with water regularly.	Odour Control during Operation Phase	DSD and Operators	V	V	V	EIA	

Legend:

D – Design, C – Construction, O - Operation

BD - Building Ordinance

ETWB TCW - Environmental and Transport Works Bureau Technical Circular

HKPSG – Hong Kong Planning Standards and Guidelines

EIAO-TM – Technical Memorandum on Environmental Impact Assessment Process

TPO - Town Planning Ordinance

WBTC - Works Bureau Technical Circulars

Remark: * means the specified measures for the DP component

