

Appendix 18.2 Summary of Environmental Impacts

Sensitive Receivers / Assessment Points	Impact Prediction Results (Without Mitigation)	Key Relevant Standards/Criteria	Extents of Exceedance Predicted (Without Mitigation)	Impact Avoidance Measures / Mitigation Measures	Residual Impacts (After Implementation of Mitigation Measures)
Air Quality Impact					
Construction Impact					
<ul style="list-style-type: none"> Representative existing residential, commercial developments and government uses within 500 m from the boundary of the Project site 	The potential sources of air quality impact associated with the construction works would include site formation, excavation, backfilling, stockpiling, material handling, spoil removal, vehicle movement and wind erosion, as well as construction activities of other concurrent projects within 500 m assessment area.	<ul style="list-style-type: none"> Annexes 4 and 12 of the EIAO-TM Prevailing Air Quality Objectives (AQO) <ul style="list-style-type: none"> <u>RSP</u> <ul style="list-style-type: none"> 24-hr average conc.: 100 µg/m³ (Number of exceedances allowed: 9) Annual average conc.: 50 µg/m³ <u>FSP</u> <ul style="list-style-type: none"> 24-hr average conc.: 50 µg/m³ (Number of exceedances allowed: 18) Annual average conc.: 25 µg/m³ 	<ul style="list-style-type: none"> N/A 	Regular watering on construction work areas, exposed surface and paved haul roads to dust suppression. Dust suppression measures stipulated in Air Pollution Control (Construction Dust) Regulation and good site practices listed below should be carried out to further minimise construction dust impact. <ul style="list-style-type: none"> Use of regular watering to reduce dust emissions from exposed site surfaces and unpaved roads, particularly during dry weather. Use of frequent watering for particularly dusty construction areas and areas close to ASRs. Side enclosure and covering of any aggregate or dusty material storage piles to reduce emissions. Where this is not practicable owing to frequent usage, watering shall be applied to aggregate fines. 	<ul style="list-style-type: none"> No residual impacts anticipated

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		<ul style="list-style-type: none"> • Proposed Air Quality Objectives (AQO) <p><u>RSP</u></p> <ul style="list-style-type: none"> ○ 24-hr average conc.: 75 $\mu\text{g}/\text{m}^3$ (Number of exceedances allowed: 9) ○ Annual average conc.: 30 $\mu\text{g}/\text{m}^3$ <p><u>FSP</u></p> <ul style="list-style-type: none"> ○ 24-hr average conc.: 37.5 $\mu\text{g}/\text{m}^3$ (Number of exceedances allowed: 18) ○ Annual average conc.: 15 $\mu\text{g}/\text{m}^3$ 		<ul style="list-style-type: none"> • For the work sites close to the ASR with a separation distance less than 5m, provide hoardings of not less than 5m high from ground level along the project boundary; for the work sites close to the ASRs with a separation distance less than 10 m, provide hoardings of not less than 3.5 m high from ground level along the project boundary; for the other work sites, provide hoarding not less than 2.4m high from ground level along project boundary except for site entrance or exit. • Avoid position of material stockpiling areas, major haul roads and dusty works within the construction site close to concerned ASRs. • Avoid unnecessary exposed earth. • Locate all the dusty activities away from any nearby ASRs as far as practicable. • Open stockpiles shall be avoided or covered. Where possible, prevent placing 	

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				dusty material storage piles near ASRs. <ul style="list-style-type: none"> • Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations. • Establishment and use of vehicle wheel and body washing facilities at the exit points of the site. • Where possible, routing of vehicles and positioning of construction plant should be at the maximum possible distance from ASRs. Imposition of speed controls for vehicles on site haul roads. <ul style="list-style-type: none"> • Instigation of an environmental monitoring and auditing program to monitor the construction process in order to enforce controls and modify method of work if dusty conditions arise. 	
Operation Impact					
<ul style="list-style-type: none"> • Existing and planned residential, commercial developments and government uses within 	<u>Air Quality Impact</u> <u>NO₂</u> <ul style="list-style-type: none"> • 19th highest 1-hr average conc.: 66 – 175 µg/m³ 	<ul style="list-style-type: none"> • Prevailing AQO <u>NO₂</u> <ul style="list-style-type: none"> ○ 1-hr average conc.: 200 	<u>NO₂, SO₂, RSP, FSP and CO</u> <ul style="list-style-type: none"> • No exceedance was predicted 	<ul style="list-style-type: none"> • No mitigation measure is required. • Specific site considerations are recommended to be 	<ul style="list-style-type: none"> • No residual impacts anticipated

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500m from the boundary of the Project site	<ul style="list-style-type: none"> • 10th highest 24-hr average conc: 25 – 92 µg/m³ • Annual average conc.: 12 – 36 µg/m³ <p><u>SO₂</u></p> <ul style="list-style-type: none"> • 4th highest 10-min average conc: 22 –47 µg/m³ • 4th highest 24-hr average: 7 – 9 µg/m³ <p><u>RSP</u></p> <ul style="list-style-type: none"> • 10th highest 24-hr average conc: 49 – 56 µg/m³ • Annual average: 19 – 22 µg/m³ <p><u>FSP</u></p> <ul style="list-style-type: none"> • 19th highest 24-hr average conc: 28 – 33 µg/m³ • Annual average: 11 – 13 µg/m³ <p><u>CO</u></p> <ul style="list-style-type: none"> • Highest 1-hr average conc: 510 – 648 µg/m³ • Highest 8-hr average: 478 – 576 µg/m³ • Highest 24-hr average: 444 – 474 µg/m³ <p><u>Methane</u></p> <ul style="list-style-type: none"> • Highest 1-hr average conc: 4468 – 4485 µg/m³ <p><u>HCl</u></p> <ul style="list-style-type: none"> • Highest 1-hr average conc: 	<p>µg/m³ (Number of exceedances allowed: 18)</p> <ul style="list-style-type: none"> ○ Annual average conc.: 40 µg/m³ <p><u>SO₂</u></p> <ul style="list-style-type: none"> ○ 10-min average conc.: 500 µg/m³ (Number of exceedances allowed: 3) ○ 24-hr average conc.: 50 µg/m³ (Number of exceedances allowed: 3) <p><u>RSP</u></p> <ul style="list-style-type: none"> ○ 24-hr average conc.: 100 µg/m³ (Number of exceedances allowed: 9) ○ Annual average conc.: 50 µg/m³ <p><u>FSP</u></p> <ul style="list-style-type: none"> ○ 24-hr average 	<p><u>Methane, HCl, HF, Formaldehyde, Vinyl Chloride, Benzene and Acetaldehyde</u></p> <ul style="list-style-type: none"> • No exceedance was predicted 	<p>implemented in order to avoid any potential air quality impact. Air sensitive at Site G3 (P05) use should locate at 5mAG or above. Long-term air sensitive use at Site O5 which is a proposed open space should be avoided. Air sensitive use within the exceedance zones in the proposed RTS, PFTF and CWHF of TKO 132 should be avoided</p>	

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	<p>1.04 – 2.19 µg/m³</p> <ul style="list-style-type: none"> Annual average: 1.00 – 1.10 µg/m³ <p><u>HF</u></p> <ul style="list-style-type: none"> Highest 1-hr average conc: 0.00 – 0.12 µg/m³ Annual average: 0.00 – 0.01 µg/m³ <p><u>Formaldehyde</u></p> <ul style="list-style-type: none"> Highest 30-min average conc: 3.35 – 4.96 µg/m³ Annual average: 1.51 – 1.65 µg/m³ <p><u>Vinyl Chloride</u></p> <ul style="list-style-type: none"> Highest 1-hr average conc: 0.40 – 0.40 µg/m³ Annual average: 0.33 – 0.33 µg/m³ <p><u>Benzene</u></p> <ul style="list-style-type: none"> Highest 1-hr average conc: 2.0 – 2.0 µg/m³ Highest 8-hr average conc: 2.0 – 2.0 µg/m³ Annual average: 1.1 – 1.1 µg/m³ <p><u>Acetaldehyde</u></p> <ul style="list-style-type: none"> Highest 1-hr average conc: 6.75 – 12.47 µg/m³ Highest 8-hr average conc: 	<p>conc.: 50 µg/m³ (Number of exceedances allowed: 18)</p> <ul style="list-style-type: none"> Annual average conc.: 25 µg/m³ <p><u>CO</u></p> <ul style="list-style-type: none"> 1-hr average conc.: 30000 µg/m³ (Number of exceedances allowed: 0) 8-hr average conc.: 10000 µg/m³ (Number of exceedances allowed: 0) <ul style="list-style-type: none"> Proposed AQO <p><u>NO₂</u></p> <ul style="list-style-type: none"> 1-hr average conc.: 200 µg/m³ (Number of exceedances allowed: 18) 24-hr average conc.: 120 µg/m³ (Number 			

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	<p>6.63 – 8.10 µg/m³</p> <ul style="list-style-type: none"> • Annual average: 1.32 – 1.36 µg/m³ 	<p>of exceedances allowed: 9)</p> <ul style="list-style-type: none"> ○ Annual average conc.: 40 µg/m³ <p><u>SO₂</u></p> <ul style="list-style-type: none"> ○ 10-min average conc.: 500 µg/m³ (Number of exceedances allowed: 3) ○ 24-hr average conc.: 40 µg/m³ (Number of exceedances allowed: 3) <p><u>RSP</u></p> <ul style="list-style-type: none"> ○ 24-hr average conc.: 75 µg/m³ (Number of exceedances allowed: 9) ○ Annual average conc.: 30 µg/m³ <p><u>FSP</u></p> <ul style="list-style-type: none"> ○ 24-hr average conc.: 37.5 			

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		<p>µg/m³ (Number of exceedances allowed: 18)</p> <ul style="list-style-type: none"> ○ Annual average conc.: 15 µg/m³ <p><u>CO</u></p> <ul style="list-style-type: none"> ○ 1-hr average conc.: 30000 µg/m³ (Number of exceedances allowed: 0) ○ 8-hr average conc.: 10000 µg/m³ (Number of exceedances allowed: 0) ○ 24-hr average conc.: 4000 µg/m³ (Number of exceedances allowed: 0) <ul style="list-style-type: none"> ● Non-AQO <p><u>Methane</u></p> <ul style="list-style-type: none"> ○ 1-hr average conc.: 600,000 			

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		<p>µg/m³ (Number of exceedances allowed: 0)</p> <p><u>HCl</u></p> <ul style="list-style-type: none"> ○ 1-hr average conc.: 2100 µg/m³ (Number of exceedances allowed: 0) ○ Annual average conc.: 20 µg/m³ <p><u>HF</u></p> <ul style="list-style-type: none"> ○ 1-hr average conc.: 240 µg/m³ (Number of exceedances allowed: 0) ○ Annual average conc.: 14 µg/m³ <p><u>Formaldehyde</u></p> <ul style="list-style-type: none"> ○ 30-min average conc.: 100 µg/m³ (Number of exceedances allowed: 0) ○ Annual 			

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		average conc.: 9 µg/m ³ <u>Vinyl Chloride</u> <ul style="list-style-type: none"> ○ 1-hr average conc.: 180000 µg/m³ (Number of exceedances allowed: 0) ○ Annual average conc.: 100 µg/m³ <u>Benzene</u> <ul style="list-style-type: none"> ○ 1-hr average conc.: 27 µg/m³ (Number of exceedances allowed: 0) ○ 8-hr average conc.: 3 µg/m³ (Number of exceedances allowed: 0) ○ Annual average conc.: 3 µg/m³ <u>Acetaldehyde</u> <ul style="list-style-type: none"> ○ 1-hr average conc.: 470 µg/m³ (Number of 			

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		exceedances allowed: 0) ○ 8-hr average conc.: 300 µg/m ³ (Number of exceedances allowed: 0) ○ Annual average conc.: 9 µg/m ³			
<ul style="list-style-type: none"> Existing and planned residential, commercial developments and government uses within 500m from the boundary of the Project site 	<u>Odour Impact</u> 5-second average odour concentration: 0.12 – 2.20 OU/m ³	<ul style="list-style-type: none"> Annex 4 of EIAO-TM 5 odour units based on an averaging time of 5 seconds 	<u>Odour</u> <ul style="list-style-type: none"> No exceedance was predicted 	<ul style="list-style-type: none"> No mitigation measure is required. 	<ul style="list-style-type: none"> No residual impacts anticipated
Noise Impact					
Construction Airborne Noise Impact					
<ul style="list-style-type: none"> Representative existing residential uses, planned residential developments, and planned educational institutions within 300m from the boundary of the Project Site 	<ul style="list-style-type: none"> Potential adverse construction noise impact due to construction works within the project boundary 	<ul style="list-style-type: none"> Annexes 5 and 13 of the EIAO-TM Leq_(30 min) 75dB(A) at 1m from the façade of residential dwellings Leq_(30 min) 70dB(A) at 1m from the 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Use of Quieter Construction Methods and Quality Powered Mechanical Equipment such as use of press-in method for sheet piling; large diameter bored piling to replace percussive piling; use of hydraulic splitter / hydraulic crusher / bursting system / quieter type saw / chemical expansion agent for demolition, concrete 	<ul style="list-style-type: none"> No residual impacts anticipated

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		façade of Educational Institutions and 65 dB(A) during examinations <ul style="list-style-type: none"> • Professional Persons Environmental Consultative Committee Practice Notes (ProPECC PN1/24) 		breaking, site formation, filling and slope cutting works and removal activities; use of fully enclosed conveyor for material handling; use of mini-breaker for small boulder removal and infrastructural works; pipe jacking using tunnel boring machine for large diameter pipe laying; use of quiet type saw, robot-type hydraulic crusher or handheld concrete crusher for building works; use of pre-casting and prefabrication technology for building superstructure works; and use of self-compacting concrete or rubber head poker vibrator <ul style="list-style-type: none"> • Use of Noise Barrier and Noise Enclosure • Careful Scheduling of Construction Activities • Good site practices <ul style="list-style-type: none"> - Only well-maintained plant should be operated on site and plant should be serviced regularly. - Silencers or mufflers on construction plant should be utilised and should be properly maintained. - Mobile plant should be sited as far away from sensitive 	

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				uses as possible. <ul style="list-style-type: none"> - Machines and plant that may be in intermittent use should be shut down between works periods or should be throttled down to a minimum. - Plant known to emit noise strongly in one direction should, where possible, be orientated so that noise is directed away from the nearby sensitive uses. - Material stockpiles and other structures should be effectively utilised to screen noise from on-site construction activities. • Submission of Construction Noise Management Plans (CNMPs) to EPD for agreement before tender invitation and before construction works commencement 	
Operation Phase Impact					
<ul style="list-style-type: none"> • Representative existing residential uses, place of public worship, planned residential developments and planned educational institutions within 300 m from the boundary of 	<u>Fixed Noise</u> <ul style="list-style-type: none"> • Adverse fixed noise impact is not anticipated due to proposed fixed noise sources with good design and mitigation measures, and environmental monitoring and audit • Potential noise impact due to 	<u>Fixed Noise</u> <ul style="list-style-type: none"> • Annexes 5 and 13 of the EIAO-TM • Appropriate ANL - 5 dB(A) as shown in Table 2 of IND-TM or the prevailing 	<u>Fixed Noise</u> <ul style="list-style-type: none"> • N/A 	<u>Fixed Noise</u> <ul style="list-style-type: none"> • Mitigation measure required at existing SNG Plant to alleviate any potential fixed noise impact. • For proposed fixed noise sources, use of quiet plant, enclosing plant inside buildings with opening facing away from 	<ul style="list-style-type: none"> • No residual impacts anticipated.

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the Project Site	<ul style="list-style-type: none"> existing fixed noise source (SNG Plant) 	background noise level for planned/proposed fixed noise sources <ul style="list-style-type: none"> Appropriate ANL as shown in Table 2 of IND-TM for cumulative fixed noise impact from planned and existing noise sources EIAO-GN 16/2023 HKPSG 		existing/proposed/planned NSRs, install acoustic silencers, noise barrier to ensure the noise compliance of the fixed noise source. Noise commissioning test for fixed noise sources will be carried out by relevant government departments/ future operators before operation of fixed noise sources. <ul style="list-style-type: none"> For various DP fixed noise sources, Fixed Noise Management Plan (FNMP) should be submitted to EPD by each of the proponent of the proposed/planned fixed noise sources For non-DPs fixed noise sources within the Project area and existing noise sources within the assessment area affecting the proposed/planned NSRs under this Project, quantitative fixed noise impact assessment should be carried out via various planning/funding/land lease mechanism. 	
	<u>Rail Noise</u> <ul style="list-style-type: none"> No adverse impact anticipated 	<u>Rail Noise</u> <ul style="list-style-type: none"> Annexes 5 and 13 of the EIAO-TM 	<u>Rail Noise</u> N/A	<u>Rail Noise</u> <ul style="list-style-type: none"> Floating slab trackform, and high attenuation baseplate etc., subject to findings of a separate EIA 	<ul style="list-style-type: none"> No residual impacts anticipated.

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	<p><u>Road Traffic Noise</u></p> <ul style="list-style-type: none"> Predicted overall noise levels: up to 73 dB(A) Predicted road traffic noise levels of the Project roads: up to 73 dB(A) 	<p><u>Road Traffic Noise</u></p> <ul style="list-style-type: none"> Annexes 5 and 13 of the EIAO-TM EIAO-GN 12/2023 L_{10(1 hour)} 70dB(A) at 1m from the façade of residential dwellings / noise sensitive temporary structures L_{10(1 hour)} 65dB(A) at 1m from the façade of educational institute 	<p><u>Road Traffic Noise</u></p> <ul style="list-style-type: none"> Exceedance of the noise criteria by up to 2 dB(A) for planned residential uses and up to 8 dB(A) for planned schools 	<p><u>Road Traffic Noise</u></p> <ul style="list-style-type: none"> Provision of low noise road surfacing (LNRS) on Local Roads L1 and L8. Provision of at-receiver mitigation measures such as acoustic window for residential uses Provision of noise insulation with suitable window type and air-conditioning for schools. 	<p><u>Road Traffic Noise</u></p> <ul style="list-style-type: none"> No residual impacts anticipated.
	<p><u>Marine Traffic Noise</u></p> <ul style="list-style-type: none"> Predicted cumulative peak marine traffic hour L_{eq(1-hr)} of 49 to 63 dB(A) Predicted peak marine traffic hour L_{eq(1-hr)} of 40 to 58 dB(A) due to Project-related vessels 	<p><u>Marine Traffic Noise</u></p> <ul style="list-style-type: none"> Measured Prevailing noise level (L_{eq(1-hr)}) during peak marine traffic hour (ranged from 54 to 64 dB(A)) 	<p><u>Marine Traffic Noise</u></p> <ul style="list-style-type: none"> No exceedance predicted 	<p><u>Marine Traffic Noise</u></p> <ul style="list-style-type: none"> No mitigation measure required 	<p><u>Marine Traffic Noise</u></p> <ul style="list-style-type: none"> No residual impacts anticipated.
Water Quality Impact					

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Construction Impact					
<ul style="list-style-type: none"> Seawater intakes, secondary contact recreation subzone, ecological and fisheries sensitive receivers such as coral communities and fish culture zones 	<ul style="list-style-type: none"> Full compliances with water quality assessment criteria were predicted except for suspended solids (up to 15.8 mg/L) and sedimentation rates (up to 650g/m²/day) 	<ul style="list-style-type: none"> EIAO-TM Annexes 6 and 14 Water Quality Objectives (WQOs) stipulated under Water Pollution Control Ordinance (WPCO) Technical Memorandum Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters (TM-DSS) Water Supplies Department (WSD) Water Quality Criteria for Flushing Water Intakes Raw water quality design basis values for the first stage of TKO desalination plant 	<ul style="list-style-type: none"> Exceedance of the assessment criteria for suspended solids elevations by up to 12 mg/L for coral communities near TKO 132 Exceedance of the sedimentation criteria by up to 550 g/m²/day for coral communities near TKO 132 	<ul style="list-style-type: none"> Deployment of silt curtains around marine construction works Mitigation measures and good site practices in ProPECC PN 2/23 Precautionary measures in ETWB Technical Circular (Works) No. 5/2005 Waste Disposal (Chemical Waste) (General) Regulation Provision of interim treatment facilities, such as chemical toilets, for construction workforce Use of non-dredged reclamation method Carrying out underwater filling behind leading seawall Control of production rates for reclamation / sediment removal works 	<ul style="list-style-type: none"> No residual water quality impact
Operation Impact					
<ul style="list-style-type: none"> Seawater intakes, secondary contact 	<ul style="list-style-type: none"> Full compliances with water quality assessment criteria were 	<ul style="list-style-type: none"> EIAO-TM Annexes 6 	<ul style="list-style-type: none"> For the 10 WSRs with WQO 	<ul style="list-style-type: none"> Precautionary design measures to 	<ul style="list-style-type: none"> No residual water

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<p>recreation subzone, ecological and fisheries sensitive receivers such as coral communities and fish culture zones</p>	<p>predicted at all representative WSRs except for 10 WSRs where the predicted TIN level exceeded the WQO and 1 WSR where the predicted <i>E. coli</i> level exceeded the WQO.</p>	<p>and 14</p> <ul style="list-style-type: none"> • WQOs stipulated under WPCO • TM-DSS • WSD Water Quality Criteria for Flushing Water Intakes • Raw water quality design basis values for the first stage of TKO desalination plant 	<p>exceedances for TIN (including bathing beaches, coral sites, Shek O headland SSSI, important spawning/nursery ground of commercial fisheries resources), there is no noticeable difference in the predicted TIN levels between all the modelling scenarios (i.e., with or without the Project). These exceedances are not caused by this Project.</p> <ul style="list-style-type: none"> • For the 1 WSR with WQO exceedance for <i>E. coli</i> (Po Toi O FCZ), there is no noticeable difference in the predicted <i>E. coli</i> levels between all the modelling scenarios (i.e., with or without the Project). These exceedances are not caused by this Project. 	<p>prevent emergency discharges from EPP and SPS</p> <ul style="list-style-type: none"> • Emergency Contingency Plan to deal with power / treatment failure at EPP and SPS • Design measures and practices in ProPECC PN 1/23 • Develop and implement Environmental Management Plan for Public Facilities at TKO 132 • Best management practices for storm water management • DSD's "Sewerage Manual (Part 2) Pumping Stations and Rising Mains" 	<p>quality impact</p>

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Sewerage and Sewage Treatment Implications					
<ul style="list-style-type: none"> Existing and planned sewerage system, sewage treatment and disposal facilities 	<ul style="list-style-type: none"> Increase in sewage discharge arising from the population and potential waterborne pollution 	<ul style="list-style-type: none"> DSD's Sewerage Manual, Drainage Record Plan and standard drawings; EPD's Guidelines for Estimating Sewage Flows for Sewage Infrastructure Planning (GESF) Version 1.0; and Annex 14 of the EIAO-TM 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Precautionary design measures to prevent emergency discharges from EPP and SPS Emergency Contingency Plan to deal with power / treatment failure at EPP and SPS 	<ul style="list-style-type: none"> N/A
Waste Management Implications					
Construction Impact					
<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Around 123,500 m³ of non-inert C&D materials and 5,164,970 m³ of inert C&D materials will be generated from reclamation, site clearance, site formation works, construction of viaducts, buildings and infrastructures. Chemical wastes will be generated from plant operation and maintenance of mechanical equipment, at a few hundred litres per month. Around 2,535 kg per day and 585 kg per day of general refuse 	<ul style="list-style-type: none"> Annexes 7 and 15 of the EIAO-TM Waste Disposal Ordinance (Cap. 354) Waste Disposal (Chemical Waste) (General) Regulation (Cap. 354C) Waste Disposal (Charges for Disposal of 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Implementation of good site practices, waste reduction measures and proper storage, collection and transport of waste Careful design, planning and good site management to reduce generation of C&D materials Monitoring of disposal of C&D waste with trip-ticket system and installing CCTV on site 	<ul style="list-style-type: none"> No residual impact anticipated

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	<p>will be generated from construction works and site-based staff and workers at TKO 137 and TKO 132 respectively.</p> <ul style="list-style-type: none"> Approximately 9,951m³ of sediment from TKO 137 and 184,601 m³ of sediment from TKO 132 will be disposed of at the marine disposal areas. Around 6.8 m³ per year at TKO 137 and 4.4 m³ per year at TKO 132 of floating refuse will be generated from construction activities at / near the sea and accumulation along seawall. 	<p>Construction Waste) Regulation (Cap. 354N)</p> <ul style="list-style-type: none"> Land (Miscellaneous Provisions) Ordinance (Cap. 28) Public Health and Municipal Services Ordinance (Cap. 132BK) – Public Cleansing and Prevention of Nuisances Regulation Dumping at Sea Ordinance (DASO) (Cap.466) Project Administration Handbook for Civil Engineering Works (PAH) 			
Operation Impact					
<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Around 350 tonnes per day of municipal solid waste will be generated from TKO 137 and TKO 132 Small quantity of chemical wastes in the order of a few cubic metres per month will be 	<ul style="list-style-type: none"> Annexes 7 and 15 of the EIAO-TM Waste Disposal Ordinance (Cap. 354) Waste Disposal 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Implementation of waste reduction measures and proper storage, collection and transport of waste 	<ul style="list-style-type: none"> No residual impact anticipated

Sensitive Receivers / Assessment Points	Impact Prediction Results (Without Mitigation)	Key Relevant Standards/Criteria	Extents of Exceedance Predicted (Without Mitigation)	Impact Avoidance Measures / Mitigation Measures	Residual Impacts (After Implementation of Mitigation Measures)
	<p>generated from maintenance and service activities and laboratories in education institutions at TKO 137.</p> <ul style="list-style-type: none"> • Around 40 tonnes per day of concrete waste and sludge will be generated from operation of the concrete batching plant and construction waste handling facility at TKO 132 • About 27 m³/day of sewage sludge and 26 m³/day of screening and grits will be generated from TKO 137 EPP and TKO 132 SPS. • Around 6.8 m³ per year at TKO 137 and 4.4 m³ per year at TKO 132 of floating refuse will be generated from accumulation along seawall. 	<p>(Chemical Waste) (General) Regulation (Cap. 354C)</p> <ul style="list-style-type: none"> • Public Health and Municipal Services Ordinance (Cap. 132BK) – Public Cleansing and Prevention of Nuisances Regulation 			
Land Contamination					
<ul style="list-style-type: none"> • Onsite construction workers and future occupants 	<ul style="list-style-type: none"> • A total of 2 areas with potential land contamination concerns (i.e. an oil stain at the skips storage and skip lorries parking area (Site S1) and the future concrete batching plant and transformer room (Site S2)) were identified at TKO 137 within the Project area. 	<ul style="list-style-type: none"> • Annex 19 of the EIAO-TM • Guidance Note for Contaminated Land Assessment and Remediation (EPD, April 2023) • Practice Guide for Investigation and Remediation of Contaminated 	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • A sampling and testing programme, targeting the hotspot identified within Site S1 had been proposed. • Further site appraisal should be carried out for the two concerned sites when site operation has ceased / after site handover in order to assess the latest site conditions / to identify the 	<ul style="list-style-type: none"> • No residual impact anticipated.

Sensitive Receivers / Assessment Points	Impact Prediction Results (Without Mitigation)	Key Relevant Standards/Criteria	Extents of Exceedance Predicted (Without Mitigation)	Impact Avoidance Measures / Mitigation Measures	Residual Impacts (After Implementation of Mitigation Measures)
		Land (EPD, April 2023) <ul style="list-style-type: none"> Guidance Manual for Use of Risk-based Remediation Goals for Contaminated Land Management (EPD, April 2023) 		presence of any potential land contamination sources, and to address any new contamination issues caused by any changes in site operation and/or land use within the two concerned sites. Any necessary site investigation SI works and remediation action are recommended to be carried out after the site operation has ceased / decommissioning of the facility but prior to the commencement of construction works at the concerned sites / areas. <ul style="list-style-type: none"> The further works including further site appraisal, associated SI works, any necessary remediation works and submission of CAP, CAR / RAP / RR would follow the relevant Guidance Manual, Guidance Note and Practice Guide. 	
Landfill Gas Hazard					
Construction Impact					
<ul style="list-style-type: none"> Onsite construction workers 	<ul style="list-style-type: none"> Quantitative landfill gas hazard is conservatively assessed as “Medium” or “Low” risk for construction phase based on the source, pathway and target 	<ul style="list-style-type: none"> Annex 7 & 19 of the EIAO-TM Landfill Gas Hazard Assessment 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Safety requirements stated in Chapter 8 - Hazards Arising During Construction of the Landfill Gas Hazard Assessment 	<ul style="list-style-type: none"> No residual impact anticipated.

Sensitive Receivers / Assessment Points	Impact Prediction Results (Without Mitigation)	Key Relevant Standards/Criteria	Extents of Exceedance Predicted (Without Mitigation)	Impact Avoidance Measures / Mitigation Measures	Residual Impacts (After Implementation of Mitigation Measures)
	risk categories for the proposed development located within the Consultation Zone for the SENT and SENTX.	Guidance Note		Guidance Note should be implemented properly during construction phase.	
Operation Impact					
<ul style="list-style-type: none"> Future occupants 	<ul style="list-style-type: none"> Quantitative landfill gas hazard is conservatively assessed as “High”, “Medium” or “Low”, for operation phase based on the source, pathway and target risk categories for the proposed development located within the Consultation Zone for the SENT and SENTX. 	<ul style="list-style-type: none"> Annex 7 & 19 of the EIAO-TM Landfill Gas Hazard Assessment Guidance Note 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> “Passive” and “Active” control measures should be considered for developments categorised as “Medium” or “High” Risk respectively. For developments of which the landfill gas risk is categorised as “Low”, some precautionary measures may be required to ensure that the planned development is safe, however the measures which depend on the actual design of indoor facilities if any (such as toilets). 	<ul style="list-style-type: none"> No residual impact anticipated.
Ecological Impact (Terrestrial and Marine)					
Construction Impact					
<ul style="list-style-type: none"> Recognised sites of conservation importance and other ecologically sensitive sites Terrestrial and marine habitats Wildlife (including flora 	<ul style="list-style-type: none"> Major permanent loss of sea area (subtidal hard substrata habitat) Permanent and temporary loss of natural habitats including terrestrial habitat (mixed woodland, shrubland, shrubby grassland/grassland), intertidal habitat (rocky shore and soft 	<ul style="list-style-type: none"> Annexes 8 and 16 of the EIAO-TM EIAO Guidance Notes Nos. 3/2010, 6/2010, 7/2023 and 10/2023 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Avoided loss of site of conservation importance and other ecologically sensitive sites Avoided direct impact on nesting Black Kite and potential movement corridor of Philippine Neon Goby, as well as the stream (i.e. S2) which the Goby was previously 	<ul style="list-style-type: none"> No unacceptable residual impact anticipated

Sensitive Receivers / Assessment Points	Impact Prediction Results (Without Mitigation)	Key Relevant Standards/Criteria	Extents of Exceedance Predicted (Without Mitigation)	Impact Avoidance Measures / Mitigation Measures	Residual Impacts (After Implementation of Mitigation Measures)
and fauna species of conservation importance)	shore), and sea area (subtidal soft substrata habitats) <ul style="list-style-type: none"> Direct impact on floral species of conservation importance and hard and black coral communities Potential direct injury / mortality of wildlife species Indirect disturbance impact (e.g. air quality, noise, light pollution, water quality, traffic and visual) on natural habitats and associated wildlife in the vicinity 			recorded. <ul style="list-style-type: none"> Minimisation of adverse impact to recognised site of conservation importance and natural habitats Minimisation on the direct loss of terrestrial and marine natural habitats and associated wildlife through careful design of the Project layout Translocation of affected coral colonies with high ecological value Protection / transplantation of floral species of conservation importance Minimisation of direct mortality of wildlife Pre-construction survey to identify the presence of faunal species of conservation importance within the Project area, esp. breeding site and low mobility species Good site practices with mitigation measures for noise, dust, light and glare and water quality (esp. marine water) impacts 	
Operation Impact					
<ul style="list-style-type: none"> Recognised Sites of Conservation Importance and Other Ecologically Sensitive 	<ul style="list-style-type: none"> Temporary loss of subtidal soft substrata due to maintenance sediment removal in TKO 132 Indirect disturbance impact 	<ul style="list-style-type: none"> Same as construction phase 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Minimisation of direct impact on hard coral communities through careful consideration on the extend of maintenance sediment 	<ul style="list-style-type: none"> No unacceptable residual impact anticipated

Sensitive Receivers / Assessment Points	Impact Prediction Results (Without Mitigation)	Key Relevant Standards/Criteria	Extents of Exceedance Predicted (Without Mitigation)	Impact Avoidance Measures / Mitigation Measures	Residual Impacts (After Implementation of Mitigation Measures)
<p>Sites</p> <ul style="list-style-type: none"> • Terrestrial and Marine Habitats • Wildlife (including flora and fauna species of conservation importance) 	<p>(e.g. air quality, noise, light pollution, water quality, traffic and visual) on natural habitats and associated wildlife in the vicinity</p> <ul style="list-style-type: none"> • Changes in hydrodynamic properties and water quality pattern 			<p>removal (i.e. conduct only in area with water depth >8m)</p> <ul style="list-style-type: none"> • Adoption of planning design subject to its feasibility (e.g. vegetation buffer) to minimise potential injury / mortality of wildlife • Good site practices with mitigation measures for noise, dust, light and glare and water quality (esp. marine water) impacts • Enhancement measures including eco-shoreline / ecological enhanced seawall to provide additional hard substrata for the recolonisation of intertidal fauna and corals • Greening opportunity on buildings such as green façades and green roofs 	
Fisheries Impact					
<ul style="list-style-type: none"> • Fish Culture Zones in Tung Lung Chau and Po Toi O, spawning grounds of commercial fisheries resources at eastern waters, nursery area of commercial fisheries resources at Port Shelter, Artificial Reefs at Outer Port 	<ul style="list-style-type: none"> • Direct loss of fishing ground and fisheries habitat • Changes in water quality • Change in hydrodynamics • Underwater sound 	<ul style="list-style-type: none"> • EIAO-TM Annexes 9 & 17 • Water Pollution Control Ordinance (Cap. 358) 	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • Mitigation measures and good site practices as proposed in Water Quality section would further minimise fisheries impacts. 	<ul style="list-style-type: none"> • No residual impact anticipated

Sensitive Receivers / Assessment Points	Impact Prediction Results (Without Mitigation)	Key Relevant Standards/Criteria	Extents of Exceedance Predicted (Without Mitigation)	Impact Avoidance Measures / Mitigation Measures	Residual Impacts (After Implementation of Mitigation Measures)
Shelter					
Cultural Heritage Impact					
Construction Impact					
<ul style="list-style-type: none"> Built heritage and other identified items 	<ul style="list-style-type: none"> No adverse impact on built heritages and other identified items would be anticipated. 	<ul style="list-style-type: none"> EIAO-TM Annexes 10 and 19 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> No mitigation measures would be required. 	<ul style="list-style-type: none"> No residual impact anticipated
<ul style="list-style-type: none"> Terrestrial archaeological heritage 	<ul style="list-style-type: none"> No direct impact on terrestrial archaeological heritage is anticipated except the areas on Fat Tau Chau within the Project boundary of TKO137 on which there would possibly be potential impact during the construction phase. Indirect impacts of ground-borne vibration, tilting and ground settlement are anticipated on Fat Tau Chau House Ruin SAI (SAI185) 	<ul style="list-style-type: none"> EIAO-TM Annexes 10 and 19 Antiquities and Monuments Ordinance (A&MO) (Cap.53) 	<ul style="list-style-type: none"> N/A 	<p><u>Monitoring of vibration, settlement and tilting</u></p> <ul style="list-style-type: none"> A condition and structural survey, as well as a baseline vibration review shall be conducted for construction works located in close proximity to the Fat Tau Chau House Ruin SAI (SAI185). Condition and structural survey should be carried out for Fat Tau Chau House Ruin SAI (SAI185) both before and after all construction works to inspect its physical condition and structural integrity. The pre- and post-condition survey reports should be submitted for AMO's record. Based on the pre-construction condition and structural survey results and construction details, the baseline vibration review before the construction phase shall evaluate if monitoring of ground-borne vibration, tilting and ground settlement is required for 	<ul style="list-style-type: none"> No residual impact anticipated

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				<p>Fat Tau Chau House Ruin SAI during the construction phase. The baseline vibration review should be submitted to AMO for comment and agreement before implementation.</p> <ul style="list-style-type: none"> Any vibration and building movement induced from the construction works should be strictly monitored to ensure no disturbance and physical damages made to the heritage sites during the course of works. If monitoring of ground-borne vibration is required, a monitoring proposal, including vibration limit, type of monitoring, checkpoint locations, installation details and frequency of monitoring should be submitted by contractor to AMO for agreement before commencement of the works. Prior agreement and consent should be sought from the owner(s), stakeholder(s) and relevant Government department(s) for the installation of monitoring points on the archaeological heritage before commencement of the works. Should the monitoring data be approaching to the vibration limit, the contractor shall propose measures to mitigate movement 	

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				<p>situation at the heritage site for consideration by AMO and implement on site, with examples, not limited to, increasing monitoring frequency, additional condition surveys, amendment / review of design of the construction, etc., so that the concerned archaeological heritage would be protected and preserved.</p> <ul style="list-style-type: none"> • AMO should be informed immediately should irregularities be observed. <p><u>Dust Suppression</u></p> <ul style="list-style-type: none"> • Due to the close proximity of the Fat Tau Chau House Ruin SAI (SAI185) to the Project Boundary, dust from the works area might have potential impact. Air Pollution Control (Construction Dust) Regulation shall be followed. • Dust suppression measures and good site practice should be observed by the project proponent during the construction phase in order to avoid dust accumulation on Fat Tau Chau House Ruin SAI (SAI185). <p><u>Buffer Zone</u></p>	

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				<ul style="list-style-type: none"> • A buffer zone should be reserved during the construction phase of the Project to safeguard Fat Tau Chau House Ruin SAI (SAI185). • The buffer zone should be established in the form of physical barrier to separate the works area from the concerned structures. • No works shall be allowed within the buffer zone. No workers or any construction related equipment and materials should trespass the buffer zone to avoid direct contact with Fat Tau Chau House Ruin SAI (SAI185). • It is suggested that the buffer zone should be of 10m from the concerned SAI or as practical as possible. Considering the challenging terrain of the environment nearby, implementation details shall be proposed by the contractor and agreed with AMO prior to commencement of the proposed works. <p><u>Archaeological Impact Assessment at the detailed design phase</u></p> <ul style="list-style-type: none"> • To ensure no archaeological resources related to the Customs Station or other facilities on Fat Tau Chau would be affected by the Project, an Archaeological Impact 	

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				<p>Assessment should be undertaken during the detailed design phase when the details of the proposed works on Fat Tau Chau are available. This Archaeological Impact Assessment at the detailed design phase shall assess the archaeological potential concerning the existence of remains or features in relations to the Customs Stations or other facilities within the Project boundary of TKO 137 on Fat Tau Chau, particularly in areas that would be affected by the proposed works. Based on the details and extent of proposed works to be carried out on Fat Tau Chau, the Archaeological Impact Assessment at the detailed design phase would propose appropriate measures if any impact on archaeological heritage is identified, for consideration and agreement by AMO. The Archaeological Impact Assessment at the detailed design phase shall be conducted by an archaeologist. It shall incorporate desktop information, site inspection results and recommendation of appropriate mitigation measures if necessary, namely change of work design,</p>	

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				<p>preservation of archaeological heritage <i>in-situ</i>, preservation by relocation, archaeological survey cum excavation or rescue excavation, archaeological watching brief or preservation by record subject to the level of potential impacts to be confirmed in the Archaeological Impact Assessment upon availability of the details and extent of the proposed works to be carried out on Fat Tau Chau, as necessary for consideration and agreement by AMO. This Archaeological Impact Assessment at the detailed design phase should be conducted by the project proponent. In the light of the above considerations, no adverse impact would be anticipated with mitigation measures agreed by AMO and implemented to the satisfaction of AMO to ensure preservation of the archaeological heritage within the Project boundary of TKO 137 on Fat Tau Chau.</p> <p><u>Precautionary Measure</u></p> <ul style="list-style-type: none"> • If antiquities or supposed antiquities under the Antiquities and Monuments Ordinance (Cap. 53) are discovered during the construction works within the 	

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				Project boundary of TKO 137 and TKO 132, the project proponent is required to inform AMO immediately for discussion of appropriate mitigation measures to be agreed by AMO before implementation by the project proponent to the satisfaction of AMO.	
<ul style="list-style-type: none"> Marine archaeological heritage 	<ul style="list-style-type: none"> No impact on marine archaeology is anticipated from this project. 	<ul style="list-style-type: none"> EIAO-TM Annexes 10 and 19 Guidelines for Marine Archaeological Investigation 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> As a precautionary measure, it is recommended to designate the locations with data gaps and the uninvestigated anomaly as archaeological exclusion zones during the marine works of the Project to ensure no impact on the seabed from anchoring of work vessels during the marine works of the Project in these locations. 	<ul style="list-style-type: none"> No residual impact anticipated.
Operation Impact					
<ul style="list-style-type: none"> Built heritage and other identified items 	<ul style="list-style-type: none"> No adverse impact would be anticipated on built heritages and other identified items during the operational phase. 	<ul style="list-style-type: none"> EIAO-TM Annexes 10 and 19 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> No mitigation measure would be required. 	<ul style="list-style-type: none"> No residual impact anticipated.
<ul style="list-style-type: none"> Terrestrial archaeological heritage 	<ul style="list-style-type: none"> No adverse impact would be anticipated on terrestrial archaeology during the operational phase. 	<ul style="list-style-type: none"> EIAO-TM Annexes 10 and 19 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> No mitigation measure would be required. 	<ul style="list-style-type: none"> No residual impact anticipated.
<ul style="list-style-type: none"> Marine archaeological 	<ul style="list-style-type: none"> No impact on marine 	<ul style="list-style-type: none"> EIAO-TM Annexes 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> No mitigation measure would be 	<ul style="list-style-type: none"> No residual impact

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heritage	archaeology is anticipated from this project.	10 and 19 <ul style="list-style-type: none"> Guidelines for Marine Archaeological Investigation 		required.	anticipated.
Landscape and Visual Impacts					
Construction Impact					
<ul style="list-style-type: none"> Landscape Resources (LRs) 	<ul style="list-style-type: none"> Negligible impact on hillside vegetation along Eastern Boundary of TKO 137 (LR5), SENT Landfill (LR7), vegetation on modified slope and amenity planting (LR10) and vegetation in developed area (LR14) Slight impact on the vegetation along drainage channel (LR4), roadside planting (LR8) and orchard/ vegetation near rural settlement (LR12) Moderate impact on the vegetation within TKO 137 (LR1), hillside vegetation at Devil's Peak (LR2), shrubland at Tit Cham Chau and Fat Tong Chau (LR3), portion of coastal water (LR6), rocky shore along western coastline of Junk Bay (LR9), hillside vegetation at Chiu Keng Wan Shan (LR11) and sandy shore along western coastline of Junk Bay (LR13) 	<ul style="list-style-type: none"> Annexes 10 and 18 of the EIAO – TM EIAO – GN 8/2023 	<ul style="list-style-type: none"> NA 	<ul style="list-style-type: none"> Tree Preservation and Transplantation Preservation of Natural Coastline Erection of Decorative Screen Hoarding Management of Construction Activities and Facilities Reinstatement of the affected landscaped area 	<ul style="list-style-type: none"> Negligible residual impact on LR5, LR7, LR10 and LR14 Slight residual impact on LR4, LR8 and LR12 Moderate residual impact on LR1, LR2, LR3, LR6, LR9, LR11 and LR13

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<ul style="list-style-type: none"> Landscape Character Areas (LCAs) 	<ul style="list-style-type: none"> Negligible impact on SENT Landfill and Ongoing Major Development Landscape (LCA6), TKO Industrial Urban Landscape (LCA7), Junk Bay Cemetery Landscape (LCA10), Tiu Keng Leng Urban Residential Landscape (LCA11) Slight impact on Fat Tong O Industrial Urban Landscape (LCA8), TKO Transportation Corridor Landscape (LCA9) Moderate impact on Fat Tong O Reclamation Landscape (LCA1), Fat Tong Chau and Tin Ha Au Upland and Hillside Landscape (LCA2), Chiu King Wan Upland and Hillside Landscape (LCA3), Tathong Channel and Joss House Bay Inshore Water Landscape (LCA4), Junk Bay Bay Landscape (LCA5) 	<ul style="list-style-type: none"> Annexes 10 and 18 of the EIAO – TM EIAO – GN 8/2023 	<ul style="list-style-type: none"> NA 	<ul style="list-style-type: none"> Tree Preservation and Transplantation Preservation of Natural Coastline Erection of Decorative Screen Hoarding Management of Construction Activities and Facilities Reinstatement of the affected landscaped area 	<ul style="list-style-type: none"> Negligible residual impact on LCA6, LCA7, LCA10 and LCA11 Slight residual impact LCA8 and LCA9 Moderate residual impact LCA1, LCA2, LCA3, LCA4 and LCA5
Operation Impact					
<ul style="list-style-type: none"> Landscape Resources (LRs) 	<ul style="list-style-type: none"> Negligible impact on hillside vegetation along Eastern Boundary (LR5) of TKO 137, SENT Landfill (LR7), vegetation on modified slope and amenity planting (LR10), vegetation in developed area (LR14) Slight impact on vegetation along drainage channel (LR4), 	<ul style="list-style-type: none"> Annexes 10 and 18 of the EIAO – TM EIAO – GN 8/2023 		<ul style="list-style-type: none"> Aesthetically pleasing design of Aboveground Structures Buffer Screen Planting Roof Greening Roadside Greening 	<p>Upon Day 1 of operation:</p> <ul style="list-style-type: none"> Negligible residual impact on LR5, LR7, LR10 and LR14 Slight residual impact on LR1, LR2, LR3, LR4, LR8, LR11 and LR12 Moderate residual

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	roadside planting (LR8), orchard/vegetation near rural settlement (LR12) <ul style="list-style-type: none"> Moderate impact on the vegetation within TKO 137 (LR1), hillside vegetation at Devil's Peak (LR2), shrubland at Tit Cham Chau and Fat Tong Chau (LR3), coastal water (LR6), rocky shore along western coastline of Junk Bay (LR9), hillside vegetation at Chiu Keng Wan Shan (LR11), sandy shore along western coastline of Junk Bay (LR13) 			<ul style="list-style-type: none"> Open Space provision Compensatory Tree Planting Landscape Treatments on Slope or Retaining Structure Shoreline Treatment 	impact on LR6, LR9 and LR13 <u>Upon Year 10 of operation</u> <ul style="list-style-type: none"> Negligible residual impact on LR1, LR2, LR3, LR4, LR5, LR7, LR8, LR10, LR11, LR12 and LR14 Slight residual impact on LR9 and LR13 Moderate residual impact on LR6
<ul style="list-style-type: none"> Landscape Character Areas (LCAs) 	<ul style="list-style-type: none"> Negligible impact on SENT Landfill and Ongoing Major Development Landscape (LCA6), TKO Industrial Urban Landscape (LCA7), Junk Bay Cemetery Landscape (LCA10), Tiu Keng Leng Urban Residential Landscape (LCA11) Slight impact Fat Tong O Industrial Urban Landscape (LCA8), TKO Transportation Corridor Landscape (LCA9) Moderate to substantial impact on Fat Tong O Reclamation Landscape (LCA1), Fat Tong Chau and Tin Ha Au Upland and Hillside Landscape (LCA2), Chiu King Wan Upland and Hillside 	<ul style="list-style-type: none"> Annexes 10 and 18 of the EIAO – TM EIAO – GN 8/2023 		<ul style="list-style-type: none"> Aesthetically pleasing design of Aboveground Structures Buffer Screen Planting Roof Greening Roadside Greening Open Space provision Compensatory Tree Planting Landscape Treatments on Slope or Retaining Structure Shoreline Treatment 	Upon Day 1 of operation: <ul style="list-style-type: none"> Negligible residual impact on LCA6, LCA7, LCA10 and LCA11 Slight residual impact LCA1, LCA2, LCA3, LCA8 and LCA9 Moderate residual impact on LCA4 and LCA5 Upon Year 10 of operation: <ul style="list-style-type: none"> Negligible residual impact on LCA1, LCA2, LCA3, LCA6, LCA7, LCA8, LCA9, LCA10 and LCA11

Sensitive Receivers / Assessment Points	Impact Prediction Results (Without Mitigation)	Key Relevant Standards/Criteria	Extents of Exceedance Predicted (Without Mitigation)	Impact Avoidance Measures / Mitigation Measures	Residual Impacts (After Implementation of Mitigation Measures)
	Landscape (LCA3), Tathong Channel and Joss House Bay Inshore Water Landscape (LCA4), Junk Bay Bay Landscape (LCA5)				<ul style="list-style-type: none"> Moderate residual impact LCA4 and LCA5
<ul style="list-style-type: none"> Key Public Viewpoint (VPs) 	<ul style="list-style-type: none"> Slight impact on view from Waterfront of LOHAS Park (VP3), view from TKO InnoPark (VP6) and view from Tseung Lam Highway Garden (VP12) Moderate impact on view from view from dragon's Back Trail (VP1), Siu Sai Wan Promenade (VP2), view from TKO Waterfront Park (VP4), view from LOHAS Park (VP5), view from Tung Lung Chau Lookout (VP9) and view from the Heng Fa Chuen Promenade (VP11) Substantial impact on view from lookout of the Devil's Peak (VP7), view from Tin Ha Shan (VP8), view from the traveller along the ferry route along the Tathong Channel (VP10) 	<ul style="list-style-type: none"> Annexes 10 and 18 of the EIAO – TM EIAO – GN 8/2023 		<ul style="list-style-type: none"> Aesthetically pleasing design of Aboveground Structures Buffer Screen Planting Roof Greening Roadside Greening Open Space provision Compensatory Tree Planting Landscape Treatments on Slope or Retaining Structure Shoreline Treatment 	<p>Upon Day 1 of operation:</p> <ul style="list-style-type: none"> Sight residual impact on VP1, VP3, VP4, VP5, VP6 and VP12 Moderate residual impact on VP2, VP9 and VP11 Substantial residual impact on VP7, VP8 and VP10 <p>Upon Year 10 of operation:</p> <ul style="list-style-type: none"> Negligible residual impact on VP1, VP3, VP4, VP5, VP6 and VP12 Sight residual impact on VP2, VP9 and VP11 Moderate residual impact on VP7, VP8 and VP10
Hazard to Life					
<ul style="list-style-type: none"> Existing and planned 	<ul style="list-style-type: none"> The off-site individual risk level is 	<ul style="list-style-type: none"> Annex 4 of the 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> No adverse impact is anticipated. 	<ul style="list-style-type: none"> No residual impact

Sensitive Receivers / Assessment Points	Impact Prediction Results (Without Mitigation)	Key Relevant Standards/Criteria	Extents of Exceedance Predicted (Without Mitigation)	Impact Avoidance Measures / Mitigation Measures	Residual Impacts (After Implementation of Mitigation Measures)
population in the vicinity of the planned desalination plant, existing SNG production plant, proposed EPP, explosive off-loading pier and proposed green fuel station (GFS)	far below 1×10^{-5} per year for the planned desalination plant and proposed EPP, while the 1×10^{-5} per year is confined within the plant boundary for the existing SNG production plant and proposed GFS. Thus, it is considered acceptable and in compliance with the relevant criterion in Annex 4 of EIAO-TM <ul style="list-style-type: none"> • The societal risks fall within the “Acceptable” region in both assessment years • No foreseeable risk implication on the Project as the explosive off-loading pier will be decommissioned before commencement of construction activities within 500m from the pier 	EIAO-TM			anticipated
Electric and Magnetic Field					
<ul style="list-style-type: none"> • Proposed EFs and Electricity Substation 	<ul style="list-style-type: none"> • Maximum electric field strength anticipated to be up to 10 V/m • Maximum magnetic flux anticipated to be up to 72 μT • Both electric field strength and magnetic flux density comply with criteria. No adverse electric and magnetic field impact would be anticipated. 	<ul style="list-style-type: none"> • International Commission on Non-ionizing Radiation Protection 1998 (Standard for General Public Exposure: 5,000 V/m & 100 μT; Standard for Occupational Exposure 10,000 	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • Not necessary 	<ul style="list-style-type: none"> • No residual impact anticipated

Sensitive Receivers / Assessment Points	Impact Prediction Results (Without Mitigation)	Key Relevant Standards/Criteria	Extents of Exceedance Predicted (Without Mitigation)	Impact Avoidance Measures / Mitigation Measures	Residual Impacts (After Implementation of Mitigation Measures)
		V/m & 500 μ T <ul style="list-style-type: none"> • Hong Kong Planning Standards and Guidelines 			